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Bureau of Land Management

Elko Field Office — November 2003

California National Historic Trail Interpretive Center and I-80 Rest Stop Waysides Environmental Assessment

BLM/EK/PL-2003/028

File 8362/1792

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1.0 Introduction

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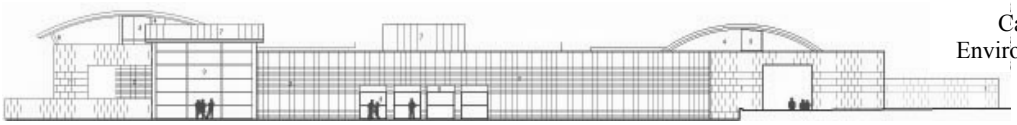
1.0 INTRODUCTION

1.1 BACKGROUND

The Bureau of Land Management (BLM), local government entities and private organizations identified the need for an interpretive center to provide information relating to the California National Historic Trail. The California National Historic Trail was used primarily between 1841 and 1869.

To meet this need, the California Trail Center Advisory Board (CTCAB) partnered with the BLM approximately four years ago to fund, plan, design, construct, manage and maintain an interpretive center in the Humboldt River valley near Elko, Nevada. The CTCAB also developed local, regional, state and federal support for the project. Funding commitments from the City of Elko, Elko County and the State of Nevada have been granted. This Environmental Assessment (EA) has been prepared to analyze the impacts of constructing the California National Historic Trail Interpretive Center (CNHTIC) known henceforth as the Center, and the Beowawe, Button Point, Trinity and Cosgrave wayside sites. A wayside site is a satellite facility that includes smaller-scale interpretive elements, such as signage. The EA was prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4332) and the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701 et seg.).

The Center site is located approximately 10 miles west of Elko, Nevada, in Elko County, just north of Interstate 80 (I-80) at the Hunter Exit 292. The Center would be the hub of four wayside sites, focused on educating visitors on the history of the California Trail. The four wayside sites are located west of the Center at established rest areas along I-80. The Beowawe rest area is located approximately 35 miles west of the Center with the wayside site located on the eastbound side. Moving to the west, the Button Point rest area and wayside are located approximately 7 miles east of Winnemucca on the westbound side of the interstate. The Cosgrave rest area and wayside are located approximately 20 miles west of Winnemucca along the eastbound side of the interstate. The westernmost wayside is located at the Trinity rest area, approximately 95 miles west of Winnemucca along the eastbound side of the interstate. The Beowawe wayside site is located in Eureka County, the Button Point wayside location is in Humboldt County, the Cosgrave wayside is located in Pershing County and the Trinity wayside is located in Churchill County.



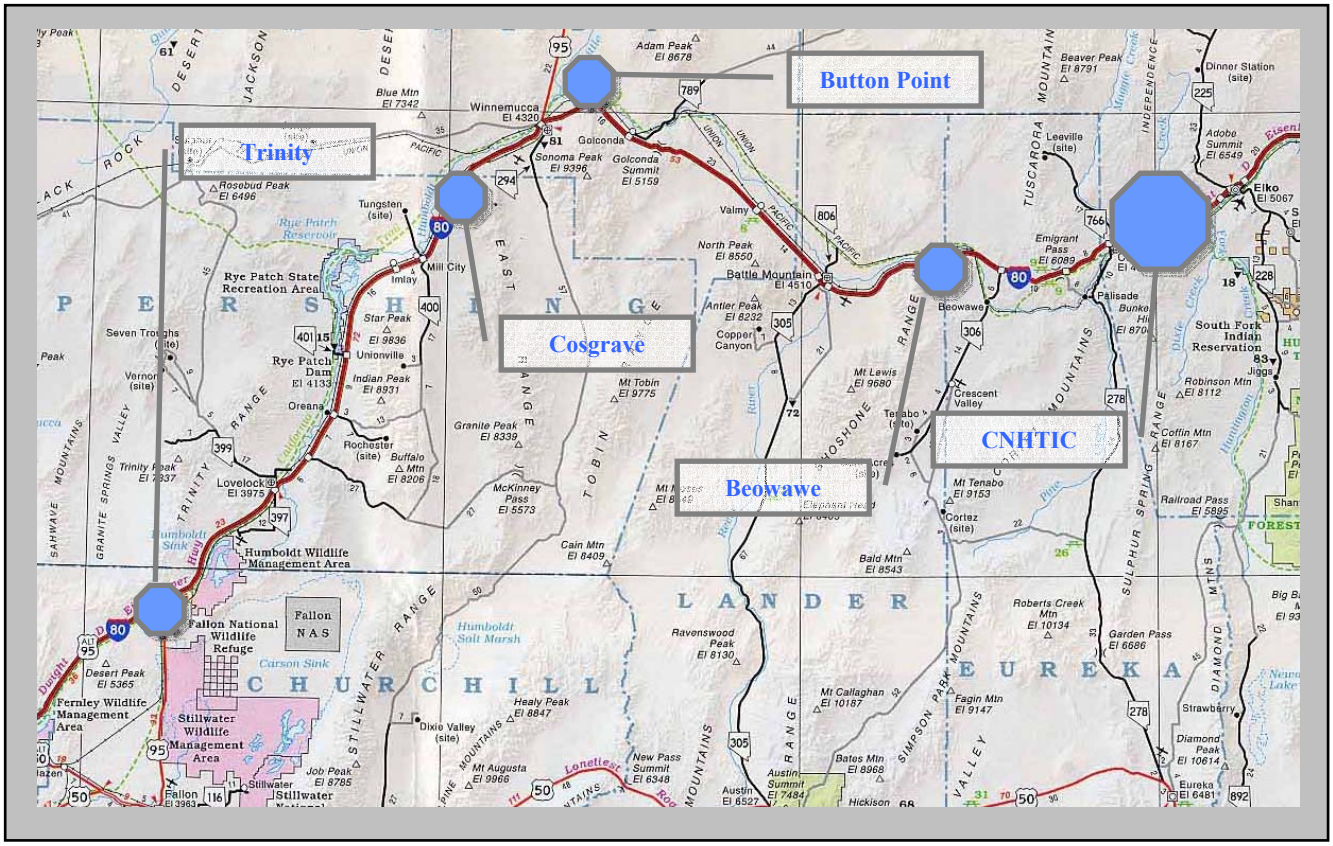


FIGURE 1-1 LOCATION OF CNHTIC AND WAYSIDE SITES

1.2 PURPOSE AND NEED FOR ACTION

1.2.1 Purpose

The Center and wayside sites have been a vision of many people in the Elko area for the past decade. Their vision is to create a world-class interpretive center, patterned after other interpretive centers already established along the trail corridor, commemorating the historical significance of the California Trail. The CTCAB, founded in 1999, is the local organization charged with seeing that the vision becomes a reality. The CTCAB was formed to be consistent with the provisions of the National Trails Systems Act of 1968, a directive setting forth parameters for a national trails system, including recreation, scenic and national historic trails. The CTCAB partnered with the BLM, collaborating to fund, plan, design, construct, manage and maintain the Center.

On December 28, 2000 a bill sponsored by Nevada Senior Senator Harry M. Reid became public law with the purpose to "establish the California Trail Interpretive Center in Elko, Nevada, to facilitate the interpretation of the history of development and use of trails in the settling of the western portion of the United States, and for other purposes" (Public Law 106-577). Wayside areas are envisioned to work in concert with the Center to enhance the region-wide interpretive story, and to provide venues

for visitors to become more personally and physically involved with the region's trail resources. The California National Historic Trail Interpretive Plan (NPS 2002) states the interpretive goals of the wayside areas that are proposed for development. The Schematic Design Interpretive Report (EDAW 2003) further refines the story told at each wayside area. The sites play a critical role in interpreting the region's significant historical resources.

1.2.2 Need

The need for action derives from several goals, including a broad goal of preserving, protecting and educating visitors about the California Trail. These goals were developed during the early phases of the California National Historic Trails Interpretive Center Schematic Design Report Process (EDAW 2003). These goals have guided development of the proposed action. The goals are separated into four categories – the CTCAB, the BLM, the community and the visitor.

CTCAB Goals

- Interpret the story of the Humboldt River in the Center.
- Create a world-class facility.
- The Center would be unique, not a duplicate of other national interpretive centers.
- Interpret the story of the Emigrant Trails, the Great Basin and impacts on Native Americans.

BLM Goals

- Create an interpretive center that provides a positive image, including one that:

    - maintains a high standard of maintenance and operations
    - creates and maintains high quality interpretive exhibits
    - creates a Class A facility

- The project shall be a showcase example of a successful community-based partnership.
- Provide a building that harmonizes with the environment.
- Create a center that helps visitors develop an appreciation of the nation's trails resources.

Community Goals

- The Center would be a gateway for regional and local historic trails experience.
- The Center would provide positive economic development.
- The Center would be a stage that allows for interactions with the community.

Visitor Goals

- The Center would provide educational opportunities for children.
- The Center would house a research facility and repository for trails related information and resources.
- Provide a highly trained support staff.
- Provide information for local and regional tourist amenities.
- Provide amenities for a safe visitor experience.
- Provide amenities for visitors of all ages; provide a broad depth of visitor experience.
- Provide access to regional historic amenities, including trails and other historic sites.

1.3 LAND USE PLAN CONFORMANCE

The proposed action as described in the next Chapter is in conformance with applicable land use plans and is consistent with Federal, State and local plans for development of the Center and waysides. A variety of previous plans and studies have also influenced the development of the proposed action. Selected plans and studies are summarized below in chronological order.

Sonoma-Gerlach and Paradise – Denio Management Framework Plans. The Sonoma-Gerlach and Paradise – Denio Management Framework Plans (1982) describe the BLM's management strategy for the Winnemucca Field Office. Activity objectives in this area include establishing an interpretive program for the Emigrant Trail.

Elko Resource Management Plan (RMP). The Elko Resource Management Plan (RMP) (BLM 1987) permits facilities to be developed along I-80 as long as they are designed so that they are not evident in the landscape. As described in chapters 2 and 3 of the EA, the facility has been designed to blend into the native landscape. Development of the Center also conforms to the RMP relating to guidelines for recreation and cultural resources.

Site Feasibility and Selection Studies. A site feasibility study (EDAW 2001) was prepared that determined the project scope, program and budget. Several site concept plans and cost estimates were developed for a site that was selected by the CTCAB, located on the ridge above the currently proposed site. The report listed many concerns and issues with developing the Center at that site, which initiated a detailed and comprehensive site selection process. The final recommendation made in the site feasibility study was to conduct a site selection study to locate and select a more suitable site.

A site selection study (EDAW 2001) analyzed a 50-mile radius from Elko, Nevada, and included a three-step process that analyzed the entire study area for suitable sites. During the study process, several site analysis workshops and public meetings were held. The study recommended two sites – the Hot Hole site in Elko and the Maggie Creek Ranch site. After further consideration by the BLM and CTCAB, the Maggie Creek Ranch site (Lower Hunter Site) was selected. The wayside interpretive sites were also conceived during this project phase, to introduce visitors to the extensive historic trail resources in the region and create a more personal and intimate interpretive experience.

Interpretive Plan. Immediately following the approval and selection of the Maggie Creek Ranch site (Lower Hunter Site), the BLM commissioned an interpretive plan for the Center and the wayside interpretive sites. The California National Historic Trail Interpretive Center Interpretive Plan (BLM 2002) set the interpretive goals and initial interpretive program. The plan also identified 35 wayside sites throughout the region, and defined appropriate development levels and priorities. The recommendations set forth in the interpretive plan are incorporated in the proposed action.

Maggie Creek Donation and Road Easement Environmental Assessment. The Maggie Creek Donation and Road Easement, Environmental Assessment (BLM 2002) includes an assessment of impacts associated with the proposed action to acquire, by donation, private property for the intended future use of the Center.

2.0 Alternatives

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2.0 ALTERNATIVES

This EA describes and analyzes the No Action and Proposed Action. Formulation of the Proposed Action has been based on guidance from several documents, including the California Trails Interpretive Center Feasibility Study (2001), California Trails Interpretive Center Siting Study (2001), and the California Trails Interpretive Center Interpretive Plan (2002).

Alternative A (no action) consists of existing conditions. Alternative B (proposed action) includes the development of the Center based on a program developed during a schematic design process. Both alternatives include constructing signage at the four wayside sites. The description of the preferred action is based on preliminary analysis and design as described in the remainder of this chapter. If this action alternative is selected, further design and analysis would continue. This chapter also includes a comparison of the components and impacts for each alternative. Other alternatives that were considered but dismissed are described in Section 2.4.

2.1 ALTERNATIVE A (NO ACTION)

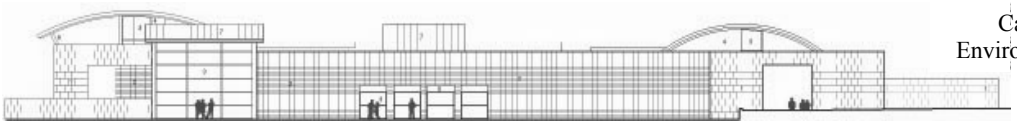
2.1.1 CNHTIC

No action would maintain current uses at the Center site. Currently, the 55-acre Center property is used primarily for cattle grazing and calving by the Maggie Creek Ranch. The existing landscape generally consists of rabbitbrush, sagebrush and native grasses, with small masses of native junipers scattered throughout. An access road currently parallels I-80 along the property.

Under the no action alternative, the Center would not be built at the Hunter site. Because of Congressional action in establishing the Center, it is not within the authority of the BLM not to construct an interpretive center. A new process would be started to select another site and prepare design concepts for the Center at the new site. Because of Congressional intent, then, the no action alternative results in a delay of the project, for at least the immediate future, while a new site is selected, rather than the more traditional no action alternative, which is not to pursue a proposal.

Retaining the acreage acquired from the Maggie Creek Ranch for the Center would be contrary to the BLM's policy of disposing of isolated, small or hard-to-manage tracts of public lands. Thus, the acreage acquired for the Center, including the mineral estate, would be disposed, according to existing regulations for the disposal of unneeded public lands. The easement acquired to provide access to the Center would be abandoned. Presumably, the future use of the Hunter site would be similar to current uses, which are cattle grazing and calving.

The following EA analyzes the no action alternative of maintaining current uses on the property without building the Center. Additional environmental analysis would be necessary if another site was selected.



2.2 ALTERNATIVE B (PROPOSED ACTION)

The proposed action provides a number of program elements that accomplish the goals outlined in the project's purpose and need. The proposed action includes development of the primary Center.

2.2.1 Interpretive Center Site Plan

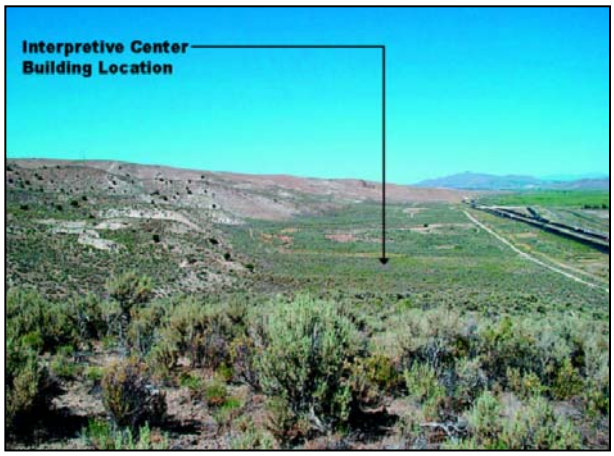


FIGURE 2-1. CNHTIC SITE (HUNTER)

As shown in figure 2-1, the 55-acre Center site is located approximately 10 miles west of Elko, Nevada, in Elko County, just north of I-80 at the Hunter Exit 292. The site overlooks the junction of the Humboldt River with the South Fork. The Humboldt was one of the most important rivers on the historic California Trail. The site also overlooks the intersection of Hastings Cutoff with the main California Trail. The Center would be the hub of the four waysides located along I-80, focused on educating visitors on the history of the California Trail.

Site Plan. The site plan (figure 2-2) was developed based on comments made at design team workshops, and includes an entry road, vehicle parking lot, interpretive plaza, day use area with amphitheater, interpretive trails, perimeter fencing and the Center building. The plan takes advantage of the linear layout of major site elements along the base of the hillside, which allows for siting the building as far from the highway as possible and placing the building at a prominent finish floor elevation (figure 2-4). The plan also takes advantage of the valley north of the building for recreational and interpretive purposes at the day use area. The project would be designed to meet the requirements of the Americans with Disabilities Act (ADA) and the Uniform Federal Accessibility Standards (UFAS).

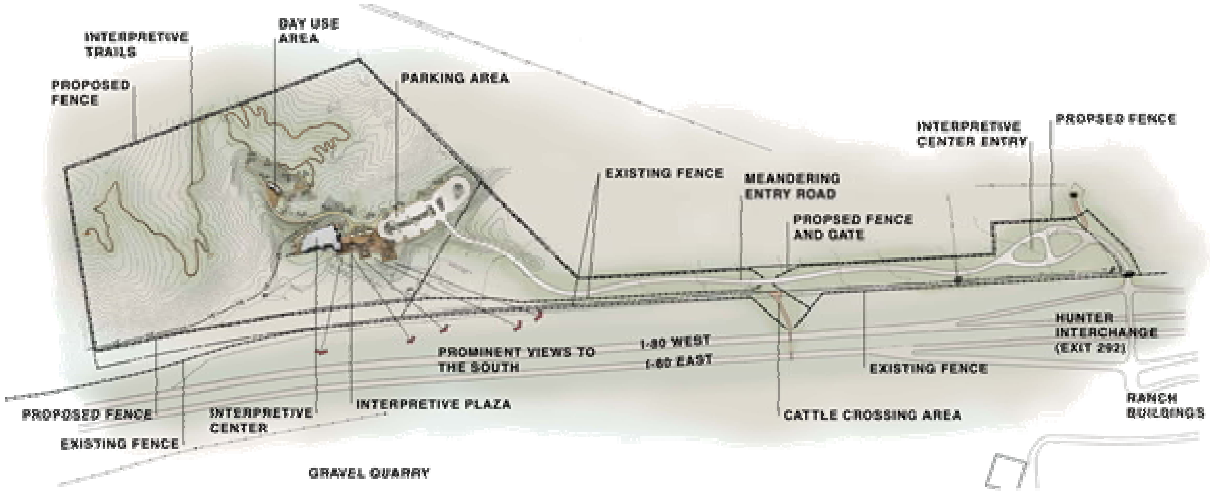


FIGURE 2-2. CNHTIC SITE PLAN

The design for the Center was guided by the following:

1. Provide appropriate buffer distance to I-80
   - Sound attenuation (the siting study recommends 600-foot minimum from I-80)
   - Visual quality from the Center

2. Maximize finish floor elevation
   - Visibility of building from I-80
   - Maximize vista of Humboldt River valley from the Center

3. Site park and road out of vista
   - Minimize site development in Center view areas

4. Consolidate visitor use areas
   - Center, interpretive plaza, amphitheater and day use area

5. Segregate interpretive area from parking lot
   - Create a rural and secluded setting for the Center

6. Integrate the Center with the site's small drainage and landscape
   - Create a rural setting and backdrop for the building
   - Integrate the Center with surrounding landscape

7. Maximize scenic views and vistas
   - Siting would take advantage of scenic vista
   - Siting for views to Hastings Cutoff, river and other significant viewpoints

8. Visitation
   - Estimated at 65,000 visitors per year

Among the design criteria for the facility were a number of considerations to minimize site disturbance and reduce its visibility.

- maximize distance from I-80
- facilities out of vista
- consolidate visitor use areas
- integrate Center with the site's small drainage and landscape
- create a rural setting and backdrop for the building
- integrate the Center with surrounding landscape

Specific design elements are described in the following paragraphs.

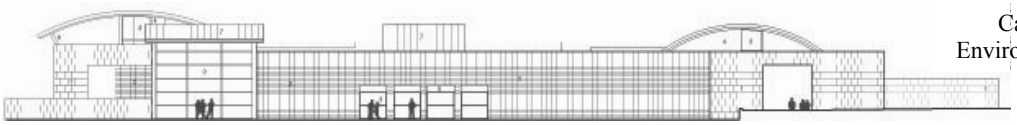


FIGURE 2-3. CNHTIC SITE – PRIMARY BUILDING

Entry Area and Access Road. The entry area would consist of a loop road outside the Center gate, allowing vehicles (designed to accommodate the largest semi-trucks) to turn around and leave the site when the gates are closed (figure 2-3). The entry area would also have a vehicle pullout with an information kiosk outside the Center gates.

The 24-foot-wide, 2-lane asphalt paved entry road would meander south and west to the Center through a right-of-way (ROW) to the parking area. This ROW, as well as the entire site, would be fenced to keep cattle from entering. The fencing would also allow the entry drive to be surrounded by a restored landscape. Historic and interpretive sculptural elements would be installed along the entry road to set the tone for visitors as they approach the Center. The entry road would also have a 36-foot-wide fenced cattle alley near the existing cattle box, which would allow the rancher to move cattle across the property.

Parking Lot. The parking lot would be asphalt surfaced with concrete curb and gutter that ends approximately 30 feet down the entry road. The parking lot would accommodate approximately 72 automobiles (4 handicapped accessible spaces) and 10 RV/bus parking spaces (1 handicapped accessible RV space). The automobile parking lot is divided into 2 aisles by a 24-foot-wide landscape area used to take up grade between the paved surfaces. This landscape bed would be seeded and planted using native vegetation. A bus drop-off at the southwest edge of the parking lot would accommodate 2 buses and provides curbside service to the interpretive plaza.

Interpretive Plaza. As shown in figures 2-3 and 2-4, visitors would proceed to the Center through the interpretive plaza, which is the first interpretive experience visitors would have as pedestrians. The plaza would be sized to comfortably accommodate large groups, as well as provide space for

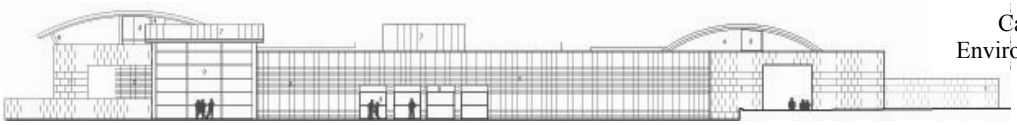
FIGURE 2-4. PHOTOSIMULATION OF BUILDING

special events and outdoor interpretive exhibits. The plaza would feature paving elements that represent the historic trail routes through the Great Basin, and landscape areas that represent the Wasatch Front, Pilot Peak, Ruby Mountains and the Sierra Nevada. The landscape areas of the plaza would provide opportunities for interpretation of the ecosystems the emigrants experienced as they passed through this region.

The plaza would also incorporate a water feature where a water runnel would serve as a metaphor for the Humboldt River, from the well to the sink. The Humboldt River feature could be used to interpret the story of the river and the importance of water, as well as provide a visual and interactive point of interest for visitors. This water feature would be approximately 2-4 feet in width with a channel depth of approximately 2-12 inches, utilizing a small amount of water. A water feature recirculation system, holding tanks, and pumping and filtration system would be in a vault below the plaza.

Day Use Area. Visitors would be able to further explore the Center site by heading up the Wagon Trail (north of the building) to the day use area. Along this 12-foot-wide concrete walk, visitors could view various wagon and hand cart exhibits that were used for the trip to California, as well as life-sized sculptures of emigrants, oxen and other animals (both domestic and wild). The Wagon Trail display area would also provide an opportunity to interpret the various types of ruts and conditions found along the trail. Paving of the exhibit area could be formed from natural earth and colored, formed and textured concrete to mimic trail conditions, such as mud, rock and sand. The adjacent concrete walk would be developed to accommodate service, maintenance and emergency vehicles. The day use area would consist of a shade structure, a multi-use plaza and an amphitheater. The shade shelter area would have several picnic tables, barbecue grills and benches for sitting.

Amphitheater. The amphitheater would be nestled into a small drainage area on the north side of the day use area. The amphitheater would be constructed using terraced seating and an informal, covered stage area with a small storage building. The amphitheater would be sized to accommodate large groups.



Interpretive Trails would lead from the day use area, providing opportunities for visitors to explore the site and walk to points of interest and overlooks. Interpretation would be provided along the trail to educate visitors about the flora, fauna, geology, geography and history of the Great Basin.

Utilities

Potable Water. As illustrated in figure 2-5, potable water would be obtained from a new well drilled on site. Some water treatment would be required. A test well would be drilled and water quality tests performed to determine the type of treatment system required. A below-grade utility vault would be located below the plaza, housing the water treatment system, pressure pumps for the Center fire sprinkler system, and the pump and circulation system for the interpretive plaza's proposed water feature.

A below-grade water storage tank (approximate 60,000 gallons) would be located at the southeast corner of the interpretive building and the southwest corner of the interpretive plaza, holding fire suppression water for the Center sprinkler system and fire hydrants. Locating the tank in this area would minimize impacts.

Wastewater. An on-site wastewater septic system and drainfield would also be constructed (figure 2-5). The final location of the drainfield would be determined after completion of geotechnical soils testing.

Stormwater. Stormwater from the rooftop and site would be routed over land and below grade through a stormwater drainage system. A water retention pond would be developed east of the parking lot for water quality purposes. Controlled flows from the pond would flow over land and eventually be directed to an existing drainage culvert under I-80.

Electrical. The source for electrical power is a transmission line located approximately one mile west of the site. From the point of connection at the transmission line, north of I-80, a new above-ground

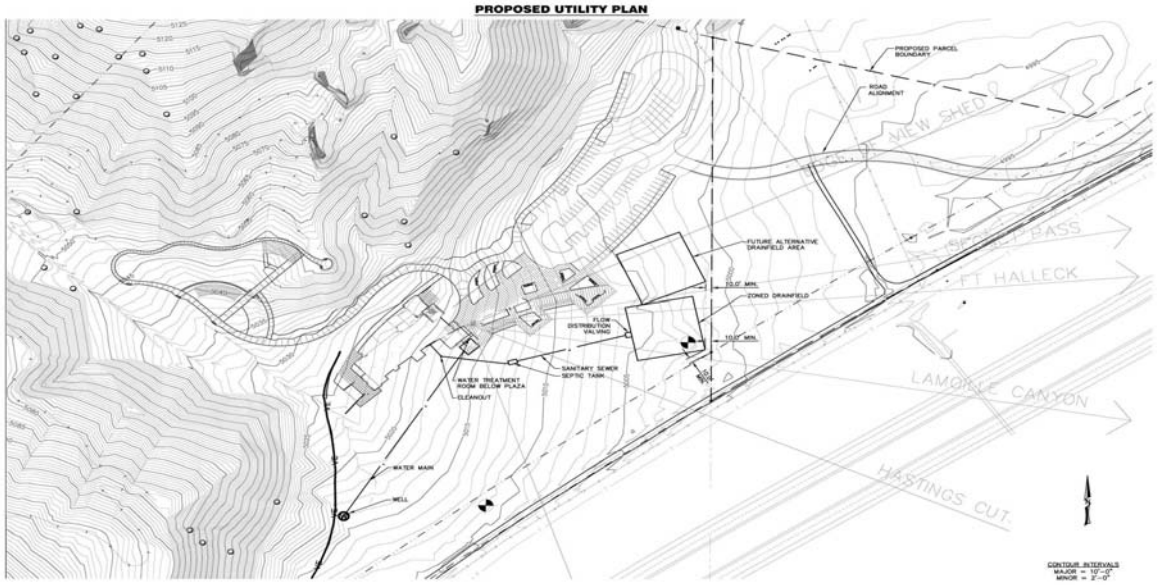


FIGURE 2-5. UTILITIES

electric service would be constructed in a 30-foot-wide ROW for an approximate distance of 0.8 mile. At this point, the power line would transition under ground approximately 0.25 mile to a new transformer located adjacent to the Center. All other distribution lines on site will be below ground.

Fences. The proposed action will include 15,130 linear feet of perimeter fencing, of which 8,415 linear feet would be new. The proposed fence specifications would be a 4-wire allotment boundary fence, bottom wire smooth, wire spacing from the ground up to 6 inches, 8 inches, 12 inches and 16 inches. T-post line posts would be all green in color with spacing of 16.5 feet apart with wood corner and stress panels. There would be two standard livestock gates at the cattle crossing, and two tubular steel security gates at the entry to the site. One cattle guard would be replaced at the Hunter Interchange with an NDOT standard guard.

Landscape Restoration and Design. Past land use practices, primarily cattle grazing, have altered the vegetation composition over much of the Center site. The site is located in an area where vegetation transitions from big sagebrush to juniper woodland, so the site has characteristics of both communities. Areas of the site located on the lower flats are dominated by big sagebrush and rabbitbrush. The hillier areas to the south also support a sagebrush community, where an occasional four-wing saltbush has replaced the rabbitbrush and a sparse stand of Utah juniper is present. Herbaceous vegetative cover and species diversity are generally low and cheatgrass is present over much of the site.

An effort would be made to rejuvenate and restore the landscape on site to provide a greater diversity of native vegetation represented by native grasses and forbs, with less dominance by sagebrush and rabbitbrush. Early initiation of this process would enable the site to begin recovery well before the Center is open to the public. Fencing the site to exclude cattle from the area would be the first step in restoration. Mechanical control would be used on the site to reduce the density of sagebrush and rabbitbrush in an effort to increase the understory of native grasses and forbs. A roller chopper and hand thinning would be used in this effort. The area would be seeded with Great Basin Wildrye, Bluebunch wheatgrass and Indian ricegrass. The thinning of sagebrush and rabbitbrush, combined with establishing a native grass understory, would reduce the fire hazard in the area around the Center. Reseeding the area with desired species will also promote diversity, benefiting wildlife species and improving aesthetics of the site.

The landscape plantings in the interpretive plaza would include plants found in various ecosystems along the trail through the Great Basin, from the Wasatch Mountains to the Sierra Nevada. This variety of planting provides an opportunity to interpret the vastly different ecosystems experienced on the trail to California. The rest of the Center site landscape design would utilize native plants.

An automated irrigation system would be provided, but would be limited to the areas immediately adjacent to the Center areas. Irrigation would be provided to establish and maintain landscape materials.

2.2.2 Design Features

Construction at the Center is expected to take up to six months. The site will be constructed using best management practices. Several of the practices are discussed below.

1. Activities associated with construction of the facilities would be done in a way that minimizes potential disturbance, including:

    - Minimize ground disturbance during construction to reduce the area requiring post-construction rehabilitation.
    - Salvage and stockpile as much topsoil as possible for later use to re-establish native vegetation. Excess materials may be incorporated into landscape design and/or hauled away to an appropriate facility.
    - Whenever construction disturbs the landscape, naturalize contours and re-establish vegetation.
    - Employ temporary erosion control techniques as required until landscape restoration is completed.
    - Overhead power lines would be raptor-proofed in accordance with suggested practices for raptor protection on power lines.

2) Utilization of best management practices to minimize erosion on site will include the following:

    - Reclamation should be implemented concurrent with construction and site operations to the fullest extent possible.
    - Final reclamation actions would be initiated within six months of the termination of operations, unless otherwise approved in writing by the authorized officer.
    - Locate soil stockpiles and waste rock disposal areas away from surface water to minimize off-site drainage effects.
    - Consider temporary measures, such as silt fences, straw bales, or mulching to trap sediment in sensitive areas until reclaimed areas are stabilized with vegetation.
    - Leave reclaimed surfaces in a roughened condition following soil application.

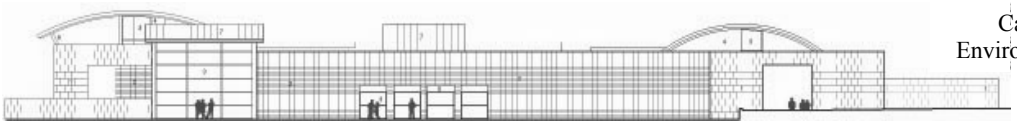
3) Grading would be required for the new entry area and access road, parking area, interpretive Center/plaza areas, day use area and interconnecting walkways. Best management practices would be followed for dust control measures. The following dust control measures would be incorporated into the project construction specifications:

    - Minimize land disturbance.
    - Use watering trucks to minimize dust; watering should be sufficient to confine dust plumes to the project work areas.
    - Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes.
    - Cover trucks when hauling dirt.
    - Stabilize the surface of dirt piles if not removed immediately.
    - Limit vehicular paths on unpaved surfaces and stabilize any temporary roads.
    - Minimize unnecessary vehicular and machinery activities.
    - Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway.
    - Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities.
    - Remove unused material.

4) Other best management practices would be followed to avoid impacts to cultural and Native American resources. SHPO consultation and a cultural resources survey have been completed for the site. No sites eligible for the National Register of Historic Places were discovered. However, construction activities will be monitored to ensure that fossils and cultural resources are not inadvertently destroyed. Under the proposed action, there would be no impact as long as the construction monitoring plan is followed. The same would be true for Native American cultural properties. During Center construction activities, though extremely unlikely, if any Native American cultural properties, items or artifacts such as stone tools and projectile points are encountered, protective measures for the objects will be taken in consultation with the affiliated Tribes. Cultural and archaeological resources are protected under the Archaeological Resources Protection Act (16 U.S.C. 470ii) and the Federal Land Management Policy Act (43 U.S.C. 1701). Also, though the possibility of disturbing Native American gravesites within the project area is extremely low, inadvertent discovery procedures must be noted. Under the Native American Graves Protection and Repatriation Act, section (3)(d)(1), the discovering individual must notify the land manager in writing of such a discovery. If the discovery occurs in connection with an authorized use, the activity which caused the discovery is to cease and the materials are to be protected until the land manager can respond to the situation.

5) No species listed as threatened or endangered species is known to be present at the Center site, and the site does not include any designated critical habitat for a listed species. No impact to a species protected by the Migratory Bird Treaty Act is anticipated. If a protected species is present on the site during construction, to include an active migratory bird nest site, the contractor must immediately notify the Elko Field Office and take measures as deemed necessary to avoid impacts.

6) Because of the number of visitors to the Center and waysides, the potential exists for introduction of weeds, especially around the edges of parking areas. Weed control would be a part of the regular maintenance that the Center would receive.



Summary

Table 2-1 summarizes the amount of area disturbed and restored for the Center included as part of the Proposed Action.

TABLE 2-1. Area impacts (acres) that would occur from the Proposed Action at the Center site. Short-term impacts are those that would occur during construction, and long-term impacts are those areas that would remain after construction. Restored areas are the difference between the area impacted during construction and the area represented by facilities. No area impacts are anticipated at the wayside sites.

Element	Short Term	Long Term	Restored Area
Entry Road	9.99	2.42	7.56
Parking Area	3.34	1.40	1.94
Plaza	1.85	0.41	1.45
Accessible Concrete Walks	0.88	0.23	0.65
Building/Shelter	2.24	0.37	1.87
Day Use Area	2.33	0.38	1.95
Amphitheater	0.07	0.06	0.01
Natural Trails	0.60	0.15	0.45
Utilities-Site	0.57	0.26	0.31
Utilities-Underground	2.50	0.00	2.50
Fence	0.19	0.19	0.00
Signage	0.00	0.00	0.00
Drainage areas	0.92	0.00	0.92
Range Restoration	na	na	28.20
Total	25.48	5.88	47.80
Note: Site acreage = 55 acres			

2.3 MANAGEMENT COMMON TO ALL ALTERNATIVES (Wayside Sites)

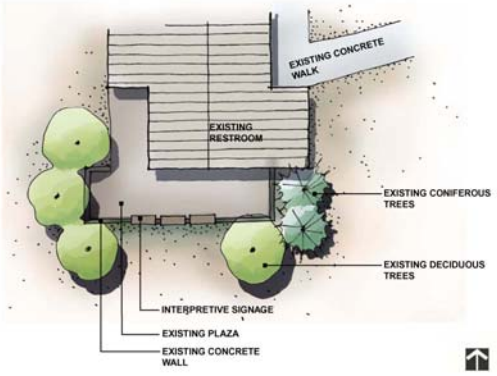
Under both Alternatives A and B, interpretive signage would be installed at each of four existing Nevada Department of Transportation rest areas along Interstate Highway 80. These wayside sites would work in concert with the Center to enhance the region-wide interpretive story, and to provide venues for visitors to become more personally and physically involved with the region's trail resources. The California National Historic Trail Interpretive Plan (NPS 2002) states the interpretive goals and development priority of each of the wayside sites that are proposed for development. The Schematic Design Interpretive Guidelines (EDAW 2003) further refine the story told at each wayside site. Wayside sites are located to achieve the following attributes:

- ease of access
- close to major roads
- potential for high visitation
- good visitor experience while accessing the site

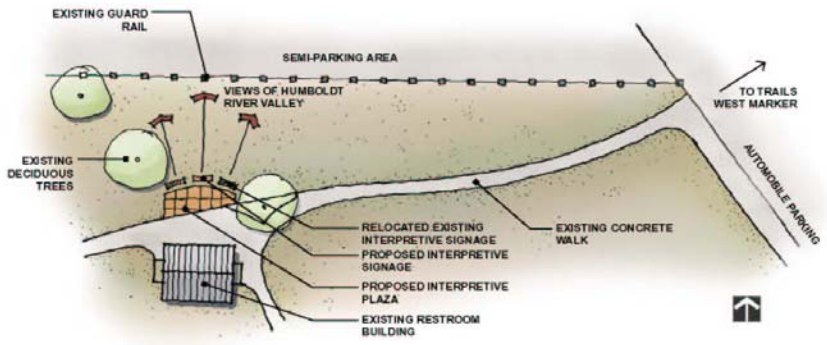
- good visitor experience at the site
- unique, multiple and compelling interpretive stories for a wide variety of visitors
- views or adjacency to a unique historic resource
- offers high quality scenic views
- avoid adverse effects to cultural resources

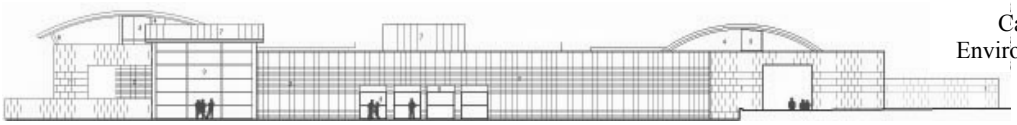
At each wayside site, there would be a series of graphic panels with a mixture of maps, illustrations, photographs and written explanations about the California Trail; facts unique to each specific wayside site; and interesting focus stories about life along the trail. The four wayside sites are described below.

Beowawe. This site, which is located at an existing I-80 rest area (eastbound exit), could potentially attract visitors from the Interstate. Many visitors travel through the area and may not be aware of the region's historic resources. A site here could encourage a longer visit to the region or a return visit in the future. Improvements to the existing rest area would consist of new interpretive signage.

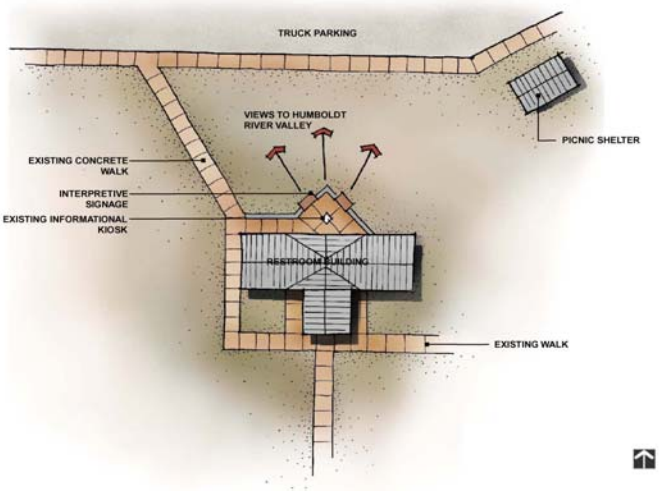


Button Point. This site is located at an existing I-80 rest area (westbound) near Winnemucca. The Nevada Department of Transportation currently maintains restrooms, picnic facilities and informational signage at the rest area. Improvements to the existing rest area would consist of new interpretive signage and small plaza.

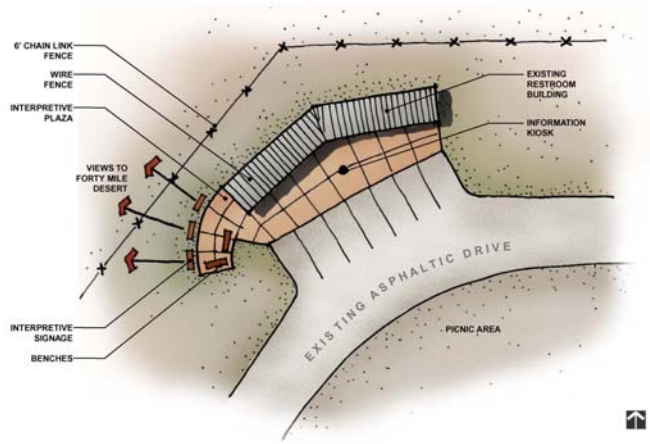




Cosgrave. This site is located at an existing I-80 rest area (eastbound) near State Highway 400. The Nevada Department of Transportation currently maintains restrooms, picnic facilities and informational signage at the rest area. The improvements to the existing rest area would consist of new interpretive signage.



Trinity. This site is located at the junction of I-80 and U.S. 95. The Nevada Department of Transportation currently maintains restrooms, picnic facilities and informational signage at the rest area. The improvements to the existing rest area would consist of new interpretive signage.



2.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

The California National Historic Trails Interpretive Center, 2001 evaluated a study area of 10,000 square miles. The siting process resulted in the identification of three preferred sites for the Center, City Park, Lower Hunter and Hot Hole. The public review process, the removal of existing facilities and design constraints resulted in the elimination of the City Park site, located beside the Elko Museum. The Hot Hole Site, located in the City of Elko, along the Humboldt River required the implementation of related projects such as the Humboldt Area River Project, significant site restoration and the support and agreement of a number of agencies with various opinions on the site.

These constraints resulted in the selection of the Lower Hunter site, currently proposed as part of the proposed action.

2.5 SUMMARY OF ALTERNATIVES

Table 2-2 summarizes the potential environmental consequences associated with each alternative for the Center. Further discussions of impacts are provided in chapter 3. There are no impacts associated with installing signs at the existing NDOT rest areas.

Table 2-2. Summary of Impacts

	Impact Topic	Alternative A (No Action)	Alternative B (Proposed Action)
1	**Air Quality**	No impacts would occur because there would be no change to current conditions.	Increased traffic due to visitation to the Center and waysides would affect air quality, but levels would still remain within acceptable standards.
2	**Noise**	No impacts would occur because there would be no change to current conditions or trends.	Noise levels would increase due to increased traffic to the Center, however, levels would not increase over ambient levels.
3	**Native American Concerns**	No impacts would occur because there would be no change to current conditions or trends.	No impacts to Native American Concerns are anticipated.
4	**Cultural Resources**	No impacts would occur because there would be no change to current conditions or trends.	Cultural resources may be affected due to increased visitation and potential disturbance to trail reaches resulting from an increased awareness of the trail. No pristine historic trail reaches are present within the project area. Benefits may also occur as the public becomes educated about the significance of the trail and need for its protection.
5	**Paleontology**	No impacts would occur because there would be no disturbance.	No impacts are anticipated
6	**Lands**	Under the no action alternative, property ownership of the Center would remain with the Maggie Ranch and land use would remain as grazing. The small shooting range present on site would remain. Land status and use would not change under this alternative for any of the rest area wayside locations.	A small amount of existing grazing use would be displaced.
7	**Water Quality**	No impacts would occur because there would be no change to current conditions or trends.	Water resources could be affected during construction due to increased sediment loading, pumping of ground water and storm water runoff due to increased impervious areas and the presence of a parking lot. Best management practices would be integrated into design and construction ensure that are no effects to water quality.

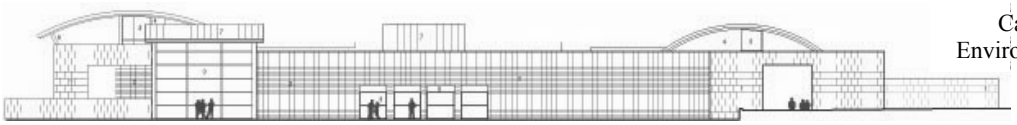


Table 2-2. Summary of Impacts

Impact Topic	Alternative A (No Action)	Alternative B (Proposed Action)
8 Recreation and Interpretation	Under the no action alternative, recreational opportunities available to the public would remain in their current status. Opportunities to actively draw the public to the region to learn about the California Trail would not be realized.	Recreation resources would be enhanced due to the opportunity presented to the public to experience the history of the California Trail.
9 Visual Resources	No impacts would occur because there would be no change to current conditions or trends.	While visible from I-80 and several residences , the Center would not be an evident visual modification to the existing landscape.
10 Vegetation	No impacts would occur because there would be no change to current conditions or trends.	Some vegetation loss would be caused by construction of facilities. A benefit would also occur as vegetation is improved by restoration using native species.
11 Wildlife	No impacts would occur because there would be no change to current conditions or trends.	Loss of habitat caused by construction of facilities would occur. A benefit would also occur as vegetation is improved by restoration using native species.
12 Special Status Species	No impacts would occur because there would be no change to current conditions or trends.	No impacts to special status species are anticipated.
13 Migratory Birds	No impacts would occur because there would be no change to current conditions or trends.	Loss of potential habitat caused by construction of facilities would occur. A benefit could also occur as existing vegetation is improved by restoration using native species, providing habitat for migratory birds.
14 Soils	No impacts would occur because there would be no change to current conditions or trends.	Loss of some soils would be caused by construction of facilities.
15 Noxious Weeds	No impacts would occur because there would be no change to current conditions or trends.	A potential increase in noxious weeds at the Center and wayside sites due to land disturbance from increased number of visitors could occur Benefits would be seen due to weed control efforts in these areas and restored areas.
16 Rangeland/ Grazing Management	No effect because there would be no change to current conditions or trends.	Some grazing land would be lost due to construction activities.
17 Socioeconomic Conditions	No impacts would occur because there would be no change to current conditions or trends.	Benefits would occur due to construction of facilities and by visitation and expenditures by tourists.

3.0 Affected Environment / Environmental Consequences

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3.0 AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES

This chapter presents a description of the environmental conditions and an analysis of the environmental consequences of the project's alternatives. The following elements of the environment are either not present or would not be affected by the proposed action, and are therefore dismissed from further consideration:

- Wild and scenic rivers
- Wilderness
- Areas of critical environmental concern
- Wetlands and riparian zones
- Prime or unique farmland
- Hazardous or solid waste
- Environmental Justice

A discussion of the affected environment and environmental consequences is found below.

3.1 AIR QUALITY

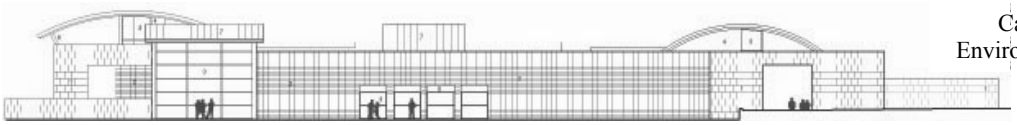
3.1.1 Affected Environment

National Ambient Air Quality Standards (NAAQS) have been established for sulfur dioxide (SO_2), carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter equal to or less than 10 microns in size (PM_{10}), fine particulate matter equal to or less than 2.5 microns in size ($PM_{2.5}$), and lead (Pb).

Specific geographic areas are classified under the Federal Clean Air Act as either "attainment" or nonattainment" for each pollutant, based on conformance with or violation of the NAAQS. The Center site and the four wayside sites are not located within any nonattainment areas.

The State of Nevada monitors PM_{10} at Elko and Battle Mountain, which are in the vicinity of the Center and Beowawe sites, respectively. At both sites, the daily and annual PM_{10} values have been below national standards. High values at Battle Mountain (one each in 1990, 1996, and 1998) were excluded as exceptional natural events due to high winds. The state monitors $PM_{2.5}$ and ozone at Fernley, which is near the Trinity wayside site. No exceedances of standards have been reported at Fernley.

Many of the visitors to the wayside sites are expected to be persons who have stopped at the rest area for other reasons. The vehicle miles generated by new visitors to the wayside site development would be less than at the Center, because there would be fewer new visitors and the access roads are shorter. Increased traffic due to visitation to the Center and waysides would not adversely impact air quality.



3.1.2 Environmental Impacts

No Action Alternative. Under the no action alternative, the project would not impact air quality, since there would be no change in use at the Center.

Proposed Action Alternative. The principal pollutants emitted during construction would be PM10 and PM2.5. The source of the pollutants would be fugitive1 dust created during clearing, grubbing, excavation and grading; demolition of structures and pavement; vehicle travel on paved and unpaved roads; and material blown from unprotected graded areas and stockpiles.

Generally, the distance that particles drift from their source depends on their size, emission height and wind speed. About 50% of fugitive dust is made up of relatively large particles, greater than 100 microns in diameter. These particles are responsible for the reduced visibility often associated with construction, as well as the nuisance caused by the deposition of dust on vehicles and in exterior areas. Given their relatively large size, these particles tend to settle within 6–9 meters (20–30 feet) of their source. Small particles, less than 100 microns in diameter, can travel nearly 100 meters (several hundred feet) before settling to the ground, depending on wind speed. These smaller particles also contribute to visibility and nuisance impacts, and include PM_{10} and $PM_{2.5}$, which are potential health hazards.

A secondary source of pollutants during construction would be the engine exhaust from construction equipment. The principal pollutants of concern are nitrogen oxides and hydrocarbon emissions, which would contribute to the formation of O_3. With the incorporation of these best management practices such as dust control measures, no adverse construction air quality impacts would occur. Visitation to the Center is estimated at 65,000 persons per year. It is assumed that most of these visitors would come in passenger vehicles and would be diverted from their journeys along I-80. The project would cause increased vehicle exhaust emissions from the added travel to and from the site over the access road, and from the additional engine starts when visitors leave the site. Assuming 2 persons per vehicle and a ¾-mile long access road, the project would add approximately 50,000 vehicle miles of travel annually. This may be compared with the more than 800 million annual vehicle miles of travel in Elko County (NDOT 2001). Elko County is an attainment area for the pollutants associated with vehicle emissions, and the increase in emissions would not be an adverse impact.

3.2 NOISE

Noise is defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment. The unit employed to describe noise is the decibel (dBA). Typical sounds range from 30 dBA (a very quiet rural area) to more than 100 dBA (automobile horns and rock concerts).

The noise scale is logarithmic. A doubling of noise energy, such as doubling the number of vehicles on a roadway, increases the noise level by 3 dBA. In general, people can barely perceive a 3 dBA or greater difference in noise levels; people trained or experienced with sound or noise measurement may

1 "Fugitive" is a term used in air quality analysis to denote emission sources that are not confined to stacks, vents or similar paths.

sometimes perceive differences of 2 dBA. Human perception of noise that seems "twice as loud" occurs with an approximate 10 dBA increase.

3.2.1 Affected Environment

The primary source of existing ambient noise at the Center site is vehicle traffic on I-80. Based on data available from the Nevada Department of Transportation (NDOT 2003), the existing average hourly noise level (Leq) at the southern site boundary, i.e., the closest part of the site to the highway, is approximately 66 dBA. The maximum noise levels would be from high-speed passing of heavy trucks with diesel engines. The noise level at the southern boundary during the truck passing is estimated at 73 dBA.

At the Center and wayside sites, noise from I-80 would be the principal source of long-term background noise. Since each of the wayside sites is an existing rest area, intermittent local noise is generated from vehicles entering and exiting, engines starting, vehicle radios, voices and other sounds common to rest area activities.

Currently, there is an active gravel mine operation immediately across the interstate from the proposed Center location. Noise generated from machinery during operation can be easily heard from the project location. Mining of this site is scheduled to be completed before the proposed opening of the Center.

Sensitive noise receptors are generally considered to be human activities or land uses that may be subject to the stress of significant interference from noise. Land uses that are associated with sensitive receptors often include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, education facilities and libraries. Other than visitors to the sites, there are no existing residences or other sensitive noise receptors within 500 feet of the Center site or any of the four wayside sites. The addition of interpretive information about the trail at the rest stops is not expected to result in any detectable increase in noise at the existing rest stops. The average increase from any visitors for the sole purpose of viewing the information would be on the order of one dBA or less.

Sensitive noise receptors may also include wildlife. There are no noise-sensitive threatened or endangered wildlife species on or adjacent to any of the proposed sites.

3.2.2 Environmental Consequences

No Action Alternative. Under the no action alternative, the project would not impact noise conditions at the proposed location of the Center.

Proposed Action Alternative. Noise would be generated at each site during construction. Construction equipment noise levels vary widely as a function of the equipment used and the activity level or duty cycle. The level of noise perceived by a receptor varies depending on distance and intervening topographic features between the receptor and the noise source.

In a typical construction project, the loudest noise levels are those of diesel-engine-driven, earth-moving equipment under full load, which are on the order of 85 to 90 dBA at a distance of 50 feet from the equipment. For each doubling of distance, noise is attenuated 6 dBA. Thus, a noise level of

85 dBA at 50 feet will be 79 dBA at 100 feet and 73 dBA at 200 feet from the source. However, the full-load noise levels of 85 to 90 dBA at 50 feet are not sustained over long durations, as construction activities vary throughout the day. The average construction noise level over an hour at a distance of 50 feet from a site boundary would be expected to be in the 75 to 80 dBA Leq range.

Standards for construction noise impact vary, and there are no known standards for the California Trail areas. However, a noise level of 75 dBA Leq at a sensitive receptor during the daytime hours is often considered an appropriate adverse impact threshold. Therefore, there would be a potential impact to sensitive receptors within 100 feet of a construction area where diesel engine driven equipment is in use.

Construction at the Center is expected to take up to six months. There are no noise-sensitive land uses or receptors within 100 feet of the Center site, and therefore there would not be any adverse construction noise impacts.

As discussed on page 2-3, the Center has been designed to reduce highway noise heard by visitors and workers. At this distance, average traffic noise levels are estimated to be 60 dBA, which would allow normal conversation. There may be occasional noise level increases to 70 dBA when some heavy trucks pass. The day use area would be approximately 800 feet from the highway. Noise levels would be less that at the Center and interpretive plaza, at approximately 58 dBA average and 68 dBA maximum. The noise levels at the plaza, Center, and day use area are all considered compatible with the proposed use, and there would be no adverse noise impact to users.

Noise would be generated at the Center by vehicles entering and leaving, engines starting, the voices of persons using the Center, and the noise of presentations in the amphitheater. As there are no nearby sensitive receptors, there would be no adverse off-site noise impacts

Construction at the four wayside sites would occur within the existing rest areas. There are no residences or similar noise-sensitive receptors within 100 feet of the rest areas. Visitors to the rest areas may be near the work sites and may be exposed to construction noise. As no new access roads would be built, there would be relatively little use of heavy construction equipment. Further, the use of the rest areas would be transient, and the visitors would be exposed for a short time. Therefore, construction noise impacts would not be adverse.

Noise levels at the wayside sites would be very similar to existing noise levels. There may be increases in noise levels attributable to the project, i.e., there would be additional visitors to the wayside sites for the sole purpose of seeing the trail interpretive information. The average noise level increase would be on the order of one dBA or less. Impacts to the soundscape would occur because of increased traffic to the Center.

3.3 NATIVE AMERICAN CONCERNS

3.3.1 Affected Environment

Various tribes and bands of the Western Shoshone have stated that federal projects and land actions can have widespread effects to their culture and religion as they consider the landscape as sacred and as a provider. The proposed actions (Center and Wayside site development) lie within the traditional

territory of the various Western Shoshone and Paiute Tribes. Tribes have not identified any properties of religious or cultural significance in the project locations.

3.3.2 Environmental Consequences

No Action Alternative. No impacts would occur because there would be no change to current conditions or trends.

Proposed Action Alternative. Impacts to Native American cultural resources and values appear to be minimal due to: the actual project size being limited; limited overall ground disturbance; and the proposed sites are in close vicinity to existing developments (I-80, structures, etc.). During Center construction activities, though extremely unlikely, if any Native American cultural properties, items or artifacts such as stone tools and projectile points are encountered, protective measures for the objects will be taken in consultation as described in Chapter 2. Therefore, no impacts to Native American Concerns are anticipated.

3.4 CULTURAL RESOURCES

The area administered by the BLM Elko Field Office is rich in cultural resources. Approximately 10% of the district has been inventoried, resulting in the recording of 11,000 prehistoric and historic archeological sites. Prehistoric use of the area spans the last 12,000 years. The people occupying the area were hunter-gatherers who practiced a migratory lifestyle. Campsites were usually small and inhabited only briefly. Long-term camps were established during winter when larger groups gathered in one location. The first inhabitants of the region are thought to have arrived at the end of the Pleistocene Period. Populations were relatively low and resource exploitation was centered on the lowlands, particularly the marshes that developed as pluvial lakes dried. As time passed, population increased and exploitation of the uplands increased as well (BLM 2003).

The prehistoric population of the region appears to have peaked in the Late Archaic Period, 700-1300 B.P. The archeological evidence of prehistoric use ranges from isolated artifacts to large camp sites, with numerous artifacts and habitation features. Site types on the district include isolated artifacts, pot drops, butchering locales, quarries, rock art, camp sites, villages, seed processing locations, lithic scatters, hunting blinds and game traps (ibid.).

The purpose of this project is to tell the story of thousands of wagons as they passed through Nevada, following the California Emigrant Trail westward. From 1841 through 1869, emigrants traveled along the California Trail. The California Trail generally followed the route of the Humboldt River across Nevada, though a number of paths were taken. Successive wagon train parties improved the early routes or pioneered new ones, following whichever route that they heard was the best. Sometimes these routes did deliver shorter distances or easier climbs, sometimes not. The most notorious example of this was the Hastings Cutoff developed in 1846 by Lansford Hastings. The cutoff was difficult and time-consuming to negotiate, and cost the Donner Party valuable time, which contributed to their reaching the Sierra Nevada too late to avoid the winter weather that trapped them and led to their subsequent infamy.

Remains of these trails can be seen in numerous forms. Remains along the Trail include graves, inscriptions, camps and artifact scatters, as well as ruts. Wagon routes are visible as cleared roadways,

frequently with raised sides. Boulders with pioneers' names or dates of passage inscribed on them are often found along these routes. Hundreds of pioneer diaries describe the passage west, including detailed descriptions of landmarks, watering holes and the daily demands of life on the trail. The federal government eventually improved two of the routes, making the passage easier by the 1850s. Railroad lines, including the Transcontinental Railroad, stage routes and toll roads soon replaced the emigrant trails, frequently along the same routes, making the passage westward ever easier and faster.

The OCTA has mapped and evaluated sections of the Trail. Trails West has put markers along the Trail, and using the OCTA information, produced a guide to the Trail through northeastern Nevada (excluding the Hastings Cutoff). Trails West rates at three levels: Original, meaning pristine trail segments; Used Trail, meaning that motor vehicles have used the trail, generally turning it into a two-track dirt road; and Approximate Trail, meaning that the trail segments have been obliterated by heavy use, development or other factors. All these trail levels occur in the project area.

The area administered by the BLM Elko Field Office also contains other historic resources. The district was crossed not only by the first Transcontinental Railroad, but by the first transcontinental telephone and the first transcontinental highway as well. Mining camps, ranches, farms, wagon roads and animal herders also left their marks on the landscape (ibid). Numerous resources within Elko County, including the Emigrant Trail, are potentially eligible for listing to the National Register of Historic Places (NRHP). In August of 1992, Congress designated the California Trail as a Historic Trail to provide for the development and maintenance of trails within federally administered areas and encourages states to operate, develop and maintain portions of trails located outside of federally administered areas.

3.4.1 Affected Environment

Two lithic scatters were located during the cultural inventory of the Center site. Neither is eligible for listing to the NRHP. A kiosk with signage interpreting the Hastings Cut-off has been constructed by the Humboldt Highland Historical Society just off I-80, Exit 292, at the eastern portion of the project area. Additionally, placement of Marker C-38 (installed by Trails West) is near this location. This is one of a series of markers installed across Nevada and described in the publication "Emigrant Trails West, A Guide to the California Trail" (Trails West 2000).

The Beowawe Wayside would be located at an existing NDOT rest area. Previous inventories have not located any cultural resources within the NDOT rest area (CrNV 12-3823). Ruts associated with the California Trail are known to exist more than a mile away from the proposed wayside. This trail segment was originally evaluated as ineligible for listing to the NRHP. They are not readily accessible. Signage currently present at the site has been erected jointly by the BLM and NDOT, and portrays the Beowawe geysers located in the Humboldt River valley to the east. Signage at this wayside is proposed to illustrate the overall route of the trail and explain that emigrants were often required to leave the Humboldt River because of topography. At Carlin, emigrants left the river, and they returned to it near the Beowawe rest stop. To avoid the potential for indirect effects that may be caused by increased visitation, information at the rest area would not include the location of site CrNV 12-2823.

The Button Point Wayside would be located within an existing NDOT rest area. The California Trail passes outside the rest area more than 0.5 mile away. Prior inventories have not located any cultural

properties within the rest area (Fawcett, per. Comm. 2003). Signage currently at this rest area has been erected by the Nevada State Parks system and the American Traffic Safety Association (ATSA). Nevada state signage portrays Frank Button, a local rancher who helped to settle the area in the mid to late 1800s and a second sign describes the discovery of the Humboldt River by Peter Ogden in the early 1800s. A sign erected by the ATSA commemorates Dwight D. Eisenhower as "Father of the Interstate Highway System."

The Cosgrave Wayside would be located at an existing NDOT rest area. The closest segment of the California Trail passes several miles from the rest area, and is mostly degraded or used trail. Inventories in the rest area have not located any cultural resources (Fawcett, pers. comm. 2003). Signage is not present at this rest area.

The Trinity Wayside would be located at an existing NDOT rest area. Previous inventories have not located any cultural resources within this rest area. The Truckee route of the California Trail passes about one mile from the rest area, and is mostly degraded or used trail (Fawcett, per. Comm. 2003). Current signage at the Trinity rest area has been erected by the Nevada State Parks and represents occupation by prehistoric man and the "40 Mile Desert" experience of the travelers of the California Trail.

3.4.2 Environmental Consequences

No Action Alternative. No impacts would occur because there would be no change to current conditions or trends.

Proposed Action Alternative. No known cultural properties would be affected by the development of the Trail Center. No adverse impacts or effects should arise from the construction and use of the Trail Center.

Impacts to cultural resources may occur due to potential increased visitation and disturbance to trail reaches because of interest gained at developed areas. However, beneficial impacts will occur as the public becomes educated about the significance of the trail and its need for protection.

3.5 PALEONTOLOGY

3.5.1 Affected Environment

The types of fossils found in a particular region depend on the age of the rocks that are currently eroding at the surface. Numerous fossil records in various geological formations can be found in Elko County. Vertebrate fossils of horses, camels and perhaps other animals occur in bedrock outcrops exposed on the hills surrounding the proposed Trail Center.

3.5.2 Environmental Impacts

No Action Alternative. Under the no action alternative, no impacts would occur because there would be no disturbance.

Proposed Action Alternative. Areas where development and construction would occur at the Center are located at the lower elevation of the property where the geology is represented by recent alluvial deposits. Some trail development would occur in the higher portions of the property where the geology is mixed. Small localized fossil finds have been reported in the upper areas of the property, but have been determined not to be in areas disturbed by trail construction. Visitors to the Center would be limited to designated trails and discouraged from accessing areas where fossils may possibly be found. As described in Chapter 2, construction activities will be monitored, therefore there would be no impact.

3.6 LANDS

3.6.1 Affected Environment

Land proposed for the Center is currently owned by the Maggie Creek Ranch. The 55-acre site borders the I-80 corridor (Figure 2-1) and is currently used for grazing. A small private shooting range is located on the western portion of the property. Adjacent land use consists of other grazing land owned by the Maggie Ranch. Several ranch buildings associated with the Maggie Ranch are located to the south of the proposed Center. The Southern Pacific railway runs immediately adjacent to I-80 to the south and the Union Pacific railway runs parallel to the Interstate approximately a mile further to the south. The four wayside sites are located at established NDOT rest areas located along I-80.

3.6.2 Environmental Impacts

No Action Alternative. Under the no action alternative, the BLM would dispose of the land acquired for the Center, including the mineral estate, according to existing regulations for the disposal of un-needed lands.

Proposed Action Alternative. Under the proposed action alternative, approximately 55 acres of privately owned land would be donated to the BLM by the Maggie Creek Ranch. Land use would change from private grazing to public use in support of the Center location. A small private shooting range would be removed as part of the construction process. An environmental assessment has been completed to address the land transfer to the BLM (BLM 2003).

3.7 SURFACE AND GROUND WATER QUALITY

3.7.1 Affected Environment

The largest river in proximity to the site is the Humboldt River. However, there are no permanent natural water bodies, wetlands, floodplains or perennial streams present on the site. Several washes are present on the site that can drain areas during high flow periods. Several regulations are applicable to protect these resources. Federal, state and local regulations affecting water resources include the Clean Water Act, Executive Order 11988 (Floodplain Management), and the Nevada water pollution control law would apply to all construction. Water appropriation permits are issued by the Nevada State Engineer of the Nevada Division of Water Resources (NDWR).

3.7.2 Environmental Impacts

No Action Alternative. There is no change in existing conditions, therefore there would be no impacts to water resources.

Proposed Action Alternative. Surface waters (ponds, streams, springs, etc.) are not present at the site for the Center. The location of the Center is out of major floodplains, and no wetlands are present. The Center would require a short-term supply of water for construction of the facility, a long-term water source for operation of the site, and a drain field system to dispose of wastewater. Both the short-term and long-term water supply would be a well located south and west of the Center. Water for the Center would be needed for drinking, restrooms and for maintenance of site facilities, including landscape plant material and fire hydrants. A groundwater well would be drilled to an estimated depth of 250–350 feet to supply water to the Center. The NDWR requires approval of water rights for use of water by diversions from a stream or use of a well.

Wastewater would receive primary treatment in a septic tank located south of the plaza. Secondary wastewater treatment would consist of a drainfield south of the parking lot. There is sufficient space south of the parking lot to construct an additional drainfield in the future as needed. Water supply and wastewater disposal would be designed to meet visitor needs of approximately 65,000 visitors per year and a maximum of 3,100 daily visitors. The septic system and drainfield would meet applicable design standards. The geology of the site and depth to groundwater suggest that septic and drainfield treatment of wastewater is appropriate.

Project construction would require securing a National Pollutant Discharge Elimination System (NPDES) permit pursuant to 40 CFR, Parts 122-124. The NPDES permit would be supported by the preparation of a Stormwater Pollution Prevention Plan (SWPPP) for construction of the facilities. The SWPPP would be comprised of Best Management Practices (BMPs) for construction of the facilities, as well as site design that limits impervious surfaces and routes storm drainage over land as much as possible. Stormwater flows would be routed to a water quality pond located north of the entrance road and east of the parking lot. The water quality pond would reduce sediment loads associated with stormwater and allow settling of pollutants from the parking lot.

NDPES permits are administered by the NDEP. At the state level, the NDEP would require a Section 401 Water Quality Certification and Stormwater Discharge Permit. These permits could likely be combined with the permits described above. NDEP also is responsible for administration of the Nevada Water Pollution Control Law, which provides state authority to protect water quality for public use, wildlife, existing industry, agriculture and the beneficial economic development of the state. If required, a grading permit from the counties in which construction would occur would be applied for. The grading permits would address similar water quality protection issues and requirements to those needed for the federal and state permits.

The aquifer that is targeted for a water supply is a large alluvial aquifer hydraulically connected to the Humboldt River. It is anticipated that the demand generated from this proposed alternative will meet current State standards. This will be confirmed during the NDWR water rights approval process. Overall, water quality parameters would be well below all surface and ground water quality standards Construction could result in temporary surface impacts from low-level increases in sedimentation rates resulting from erosion of disturbed areas, which are estimated to encompass approximately 25 acres.

Sediment accumulation would be expected to be negligible during construction, particularly if surface stabilization techniques are employed effectively. Erosion of soil is expected to decline to less than current levels after approximately 48 areas have been rehabilitated to an improved vegetative condition. Therefore, there would be no impact to surface and ground water quality.

3.8 RECREATION AND INTERPRETATION

3.8.1 Affected Environment

The public lands administered by the BLM Elko Field Office provide opportunities for a wide variety of dispersed recreational activities, including fishing, sightseeing, hunting, camping, white water rafting, photography, rock-hounding and off-highway vehicle use. The majority of the recreational use (over 95%) that occurs in the District is dispersed. There are six Special Recreation Management Areas, four developed campground/recreation sites and many other undeveloped sites.

In addition to surrounding recreational amenities, the California National Historic Trail is a large attraction. The California National Historic Trail was established as National Historic Trails by Congress in 1992. This trail passes in close proximity to the site. Recreational use of the trails includes interpretation, hiking, biking, horseback riding and historic reenactments of the trail experience. Usage of the trails is increasing due to heritage tourism (i.e., people rediscovering their past), commemorative activities and media interest (NPS 1999). Each June, as many as 600 members of the National Pony Express Association reenact the historic ride (GORP 2000). Others reenact the westward trek along the California Trail by covered wagon and on foot.

Potential users of the proposed facilities would include the following:

- east/west route tourists
- tour groups
- history destination travelers
- local recreational users
- special event and festival participants
- school and organized youth groups

3.8.2 Environmental Impacts

No Action Alternative. Under the no action alternative, no change in the existing status would exist; therefore, recreational opportunities would not be impacted.

Proposed Action Alternative. Development of the Center would enhance opportunities for historical interpretation and provide a notable resource for residents of the region, travelers along I-80, and those with a special interest in trail history. Secondarily, additional opportunities would be provided for hiking, sightseeing, wildlife viewing, bird watching, outdoor photography and scenic viewing in the immediate area of the Center. Annual visitation is expected to average 65,000 people.

Attraction to the Center and wayside locations will likely make visitors aware of other attractions in the area leading to increased visitation to these areas. The Center would also provide an outlet through which to distribute information about other trail sites and other local recreational activities. Many

recreational opportunities are near or along routes leading to the Center. This alternative would provide users of the I-80 corridor additional opportunities to learn about the attraction and activities available to them while traveling through the central region of Nevada. Visitors will be educated about and encouraged to practice appropriate, low impact Trail visitation.

3.9 VISUAL RESOURCES

The BLM has established visual resource management guidelines for their lands, depending on the character and quality of the lands, the sensitivity of the viewers who see it, and considering the number of viewers, their sensitivity and expectations. The BLM lands adjacent to I-80 have been designated as a "low visibility" corridor in both the Elko and Wells Resource Management Plans. This designation reflects the high volume of viewers in this area and the need to keep future modifications at a level where they are "not evident."

3.9.1 Affected Environment

The proposed location of the Center has historically been grazed as have much of the lands adjacent to the I-80 corridor. In response, it exhibits a sagebrush-rabbitbrush dominated community typical to this region. The site is somewhat elevated above I-80 and is therefore visible to the highway, particularly to westbound travelers. It is immediately backdropped by a prominent ridgeline. Visual interest, however, is most strongly oriented toward the Humboldt River, opposite the Center.

From the proposed location of the Center, several residences and buildings associated with the Maggie Creek ranch are visible. Also visible, immediately adjacent to the south side of I-80, is the main line of the Southern Pacific railroad, and a mile farther to the south east the mainline of the Union Pacific railroad. An active gravel extraction pit is located to the south of I-80 across from the proposed Center. The gravel pit is scheduled to be closed by the time the Center would open.

The wayside sites would have the same management concerns from a visual resource perspective since they are located along the I-80 corridor and heavily visited. They differ, however, in that they are developed facilities with existing structures and facilities. The interpretive panels that would be added would be designed to be attractive and provide information of interest to travelers.

3.9.2 Environmental Impacts

No Action Alternative. Under the no action alternative, no changes would be anticipated therefore visual resources would not be affected.

Proposed Action Alternative. Among the design criteria for the facility were a number of considerations to minimize site disturbance and reduce its visibility. This is demonstrated by the site plan and photo simulations (Figures 2.2 through 2.4). As illustrated, the proposed project fits snugly into the recess of the landforms that surround it. Its profile is low and does not break into the skyline.

The analysis of the EA for the Maggie Creek Donation and Road Easement (BLM 2002) concludes by saying that, "The location greatly reduces the visibility from Highway I-80, thereby in conformation [with] the Low Visibility Corridor objectives."

This conclusion is supported by the designs and plans for the Center that have evolved in response to the objective of maintaining site integrity, and the plans and simulations that illustrate the outcome of this endeavor. While visible from I-80 and several residences , the Center would not be an evident visual modification to the existing landscape. It would, in fact, provide a new viewing opportunity to the traveling public of the lands along this corridor because of the outward vistas that have been designed into the facility. It calls attention to the river corridor and the route of immigration that was afforded to a growing country, and the continuing transportation access that it provides today.

3.10 VEGETATION

3.10.1 Affected Environment

Natural vegetation communities in the area of the Center and the four wayside sites are characteristic of those found over much of the lower elevations of the Great Basin throughout central Nevada. Vegetation communities in the project area are represented by the annual grasslands, perennial grasslands, sagebrush, rabbitbrush, and riparian and wetland areas associated with the Humboldt River. The Center is located in an area that is not developed and supports species found in more naturalized communities (table 3-1). Vegetation at the wayside sites is dominated by maintained landscape tree species with a disturbed area "fringe" around the perimeter of the rest area.

Plant communities in the proximity of the Center and four wayside sites vary depending on the site. The Center is dominated by a sagebrush community, common to that found over much of the Great Basin. An area of scattered pinyon juniper woodland occurs along the upper reaches of the property, and an area dominated by rabbitbrush is also present. This area is currently grazed by cattle and is located near a fence line where cattle often congregate, leading to some disturbance of vegetation. The Center overlooks a wetland and riparian areas adjacent to the Humboldt River located approximately one-half mile to the south across I-80.

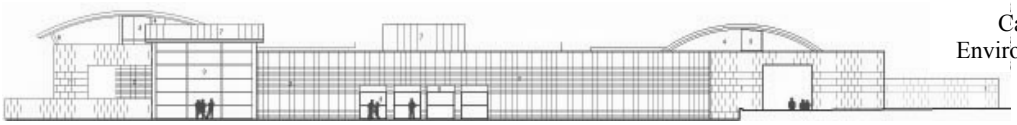
Three of the four wayside sites support larger trees that are located throughout the rest areas (table 3-1). These trees are maintained by NDOT and are important for supplying shade to visitors using the rest area, especially during the summer. Small areas of Kentucky bluegrass are also maintained at the Button Point and Gosgrave rest areas. The Trinity rest area has no maintained vegetation. The fringe area around all of the rest areas supports small areas of weedy vegetation typically dominated by annual weeds, including cheatgrass and halogeton.

Wildfire is common across the landscape adjacent to I-80. Unless reseeded to native species, annual grassland dominated by cheatgrass becomes established. This type of annual grassland has become established in proximity to the Button Point and Beowawe rest areas and wayside locations.

TABLE 3-1. COMMUNITIES AND PLANT SPECIES FOUND AT THE CNHTIC AND FOUR WAYSIDE SITES

Site	Site Community	Dominant Species Common Name(Scientific Name)
CNHTIC	big sagebrush	big sagebrush (*Artemisia tridentata*) pepperweed (*Lepidium* spp.) basin wildrye (*Elymus cinereus*) cheatgrass (*Bromus tectorum*) tansy mustard (*Descurainia pinnata*) crested wheatgrass (*Agropyron cristatum*) kochia (*Kochia scopario*) rabbitbrush (*Chrysothamnus viscidiflorus)*
	juniper woodland	Utah juniper (*Juniperus osteosperma*) big sagebrush (*Artemisia tridentata*) snakeweed (*Gutierrezia sarothrae*) phlox (*Phlox* spp.) wild buckwheat (*Eriogonum* spp.) evening-primrose (*Oenothera* spp.) western wheatgrass (*Agropyron smithii*)
	rabbitbrush/sagebrush	big sagebrush (*Artemisia tridentata*) rabbitbrush (*Chrysothamnus nauseosus*) cheatgrass (*Bromus tectorum*) four-winged saltbush (*Atriplex canescens*)
Beowawe Gateway Wayside	landscaped	honey locust (*Gleditsia triacanthos inermis*) Utah juniper (*Juniperus osteospera*) common apple (*Malus* spp.) Fremont cottonwood (*Populus fremontii*)
	disturbed	Halogeton (*Halogeton glomeratus*)
Button Point Wayside	landscaped	honey locust (*Gleditsia triacanthos inermis*) Siberian Elm (*Ulmus pumilus*) green ash (*Fraxinus pehhsylvanica*) bluegrass (*Poa pratensis*)
	disturbed	cheatgrass (Bromus tectorum) Russian thistle (Salsola iberica) pepperweed (Lepidium spp.) three-awn (Aristida purpurea)
Cosgrave Wayside	landscaped	honey locust (Gleditsia triacanthos inermis) Austrian pine (Pinus nigra) bluegrass (Poa pratensis)
Trinity Wayside	disturbed	halogeton (Halogeton glomeratus)
	landscaped	No maintained vegetation

The addition of signage at the rest stops is not expected to result in any change to vegetative conditions.



3.10.2 Environmental Impacts

No Action Alternative. As described in the above, vegetation under the no action alternative would remain similar to that experienced in the past. Historical grazing practices would continue on the site potentially impacting vegetation. At all rest areas, except the Trinity site, trees and grass are maintained. Under the no action alternative, impacts to vegetation would likely remain the same as those experienced in the past. The maintenance program for this vegetation is not expected to change in the future.

Proposed Action Alternative. Under the proposed action alternative, approximately 26 acres of vegetation would be impacted at the Center during construction from site disturbance. After construction, approximately 20 acres would be restored, leaving a total of 6 acres lost to roadways, structures and paths supporting the Center. Areas restored after construction would be replanted to a mix of locally native forbs, grasses and shrubs.

The proposed action would also rejuvenate and restore the remainder of the landscape on site (28 acres) to provide a greater diversity of native vegetation represented by native grasses and forbs, with less dominance by sagebrush and rabbitbrush. Early initiation of this process would enable the site to begin recovery before the Center is open to the public. Fencing the site to exclude cattle from the area is the first step in restoration. Mechanical control, including the use of hand tools would likely be used to remove stands of sagebrush and rabbitbrush in selected areas of the property. Reseeding these areas with desired native grass, forb and shrub species would promote species diversity to benefit wildlife species and improve aesthetics of the site.

3.11 WILDLIFE

3.11.1 Affected Environment

Because the Center site supports a number of different plant communities, a variety of wildlife species would be expected to use this site. Big sagebrush habitat occurs at this site. Bird species that may occur in this area include loggerhead shrike (*Lanius ludivicianus*), sage thrasher (*Oreoscoptes montanus*), black-tailed gnatcatcher (*Polioptila melanura*), black-chinned sparrow (*Spizella atrogularis*), sage sparrow (*Amphispiza belli*), American kestrel (*Falco sparverius*), and rufous-crowned sparrow (*Aimophila ruficeps*), among others. Mammals could include desert woodrat (*Neotoma lepida*), sagebrush vole (*Lemmiscus curtatus*), black-tailed jackrabbit (*Lepus californicus*), pronghorn (*Antilocarpa americana*), mule deer (*Odocoileus hemionus*), and American badger (*Taxidea taxus*). Impacts from past cattle grazing can be seen in the area and has resulted in some habitat degradation, particularly in the herbaceous vegetation component.

The four wayside sites largely represent islands of urbanized, landscaped habitat surrounded by native plant communities and Interstate 80. Bird species that would likely use these disturbed, landscaped areas include: scrub jay (*Aphelocoma californica*), American goldfinch (*Carduelis tristis*), American robin (*Turdus migratorius*), northern flicker (*Colaptes auratus*), common raven (*Corvus corax*), red-tailed hawk (*Buteo jamaicensis*), dusky flycatcher (*Empidonax oberholseri*), and Brewer's blackbird (*Euphagus cyanocephalus*). Mammals that might forage or pass through the waysites include various mice, black-tailed jackrabbit (*Lepus californicus*), mule deer (*Odocoileus hemionus*), coyote (*Canis latrans*), and possibly mountain lion (*Felis concolor*).

Landscaped areas at the waysides would continue to be maintained in the future. The minor addition of signage is not expected to affect wildlife use of these areas.

3.11.2 Environmental Impacts

No Action Alternative. Wildlife impacts under the no action alternative at the Center site would remain the same as those currently resulting from rangeland uses. Impacts to wildlife would include a reduction in the type and amount of species that will utilize the site. For example, the presence of low quality and quantity of forage will reduce the amount of large mammals frequenting the site. Species adaptable to grazing disturbances will continue to use the site. However, species requiring a regenerating herbaceous layer of vegetation for browse or cover probably will not occur, or they will be present in only very small numbers.

Proposed Action Alternative. Development of the Center site would result in the permanent loss of nearly 6 acres to new roadways, structures and landscaping. Another nearly 28 acres would be restored to good examples of non-grazed native plant communities common to this region, although some temporary site clearing would be needed to achieve the restoration. A new trail would be created providing human access to the upper slope habitats, an area that is not currently traversed by people. While all of these actions at the Center site are expected to result in temporary impacts during construction and restoration, the long-term impacts on wildlife are considered to be beneficial. Wildlife diversity will probably improve as habitats are restored, and most common species will become adapted to human intrusion from the nature trail within the upper slope habitats.

3.12 SPECIAL STATUS SPECIES

3.12.1 Affected Environment

Biological surveys have been completed and no special status species are known to occur on or near the Center or wayside sites.

The bald eagle (*Haliaeetus leucocephalus*) is a federally-listed threatened species that could infrequently inhabit the current Maggie Creek Ranch area during winter months, and potentially forage on the acreage that will become the Center site. The area could provides some marginal habitat for a number of BLM Sensitive Species and State of Nevada listed species, including the golden eagle (*Aquila chrysaetos*), ferruginous hawk (*Buteo regalis*), burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), and sage grouse (*Centrocercus urophasianus*). Sage grouse habitat in the area includes summer, brood rearing, and winter range.

Because of the heavily landscaped and maintained nature of the wayside sites, they do not provide habitat to support special status wildlife species. Species such as sage grouse or ferruginous hawk could occur in the surrounding sagebrush environs, but not actually on the wayside sites.

The minor addition of signage is not expected to affect use of these areas by a special status species.

3.12.2 Environmental Impacts

No Action Alternative. There would be no impacts to special status species under the no action alternative. At the Center site, grazing would likely continue, resulting in a minimal herbaceous layer and damage to the sage brush vegetation. While there is no evidence to indicate that the site is being used by any federally-listed species, it is possible that some state-listed and/or BLM sensitive species occur on site, such as sage grouse or burrowing owl. Species such as these are probably already adapted to the current conditions at the site, so continued rangeland practices in the absence of this project would not affect their use of the site.

At the four wayside sites, landscaped areas would continue to be maintained in the future, so special status species use in surrounding areas would not change.

Proposed Action Alternative. Under this alternative, while there would be a permanent loss of nearly 6 acres of habitat plus temporary construction impacts to another 28 acres, common wildlife and special status species would likely benefit from long-term habitat improvements on the Center site. The exclusion of grazing and restoration of the Center site is expected to improve habitat composition, to include less rabbitbrush, more sagebrush, and an increase in native grasses and forbs in the understory.

At the four wayside sites, no impacts to special status species are expected.

3.13 MIGRATORY BIRDS

3.13.1 Affected Environment

There may be over 100 species of birds inhabiting the Center site and surrounding areas, either year-round or for part of the year. Native species of birds are protected by the federal Migratory Bird Treaty Act (MBTA). In recent decades, this act saw little enforcement. However, with the signing of Executive Order 13186 in 2001, the federal government is elevating awareness of the migratory bird resource and mandating that federal agencies seek to achieve greater protection of the resource. Impacts to migratory birds need to be avoided, or minimized, or at least mitigated.

The addition of signage at the rest stops is not expected to affect migratory bird use of these landscaped sites.

3.13.2 Environmental Impacts

No Action Alternative. The no action alternative would continue to have negative effects on migratory birds. Grazing would continue on the Center site, and species that have already adapted to that level of disturbance would continue to nest and forage on the property.

At the four wayside sites, landscaped areas would continue to be maintained in the future, so migratory bird use of on-site vegetation would not change.

Proposed Action Alternative. Because development of the Center site is going to involve some land clearing and permanent loss of habitat, there would be short-term and long-term impacts to birds protected by the MBTA. However, the benefits derived from reduced grazing and a subsequent increase in the herbaceous layer component, coupled with the reductions of dense rabbitbrush and restoration of a patchy sagebrush environment, are likely to improve overall habitat quality for migratory birds on site. Direct impacts would also be avoided by the best management practices described in Chapter 2. At the four wayside sites, there will be little noticeable change with respect to the migratory bird resource under the action alternative. Landscaped areas will continue to be maintained in the future, so migratory bird use of on-site vegetation will not change.

3.14 SOILS

3.14.1 Affected Environment

Soils in the area of construction at the Center are silty loams with some gravel. Soil types found in this area are the Monarch, Ocala and Oroavda, which are typically associated with alluvial fans. These soils typically have moderately slow to slow permeability, moderate to low shrink-swell, and slow to very slow runoff.

Soils at the wayside sites have largely been modified by prior development, and are either paved over or compacted.

Microbiotic or cryptogamic crusts are not present at the proposed Center location or at the wayside sites.

3.14.2 Environmental Impacts

No Action Alternative. Under the no action alternative, impacts to soils caused by concentrations of livestock in the area along the fence line would continue to occur.

Proposed Action Alternative. Under the proposed action alternative, approximately 26 acres of soils would be impacted at the Center during construction. Erosion control methods and BLM best management practices will be used during construction to minimize impacts to soils. After construction, approximately 20 acres would be restored to native vegetation, leaving approximately 6 acres of soils permanently lost to roadways, structures and paths. Areas restored following construction would be replanted to a mix of locally native forbs, grasses and shrubs. Minor impacts to soils during mechanical control of shrubs may occur during restoration activities.

Anticipated impacts to soils at wayside sites would be minimal. Soils at the Button Point wayside site would be impacted by the construction of a small plaza to an area beyond the established rest area limits. Impacts would be approximately 0.05 acre disturbed during construction, 0.03 acre of permanent loss to soils, and 0.02 acre restored to locally native perennial grasses.

3.15 INVASIVE, NON-NATIVE SPECIES

3.15.1 Affected Environment

Over 40 weeds are listed on the State of Nevada noxious weed list. No Nevada State listed noxious weeds were found at any of the sites. Invasive weeds common at most sites include Halogeton (*Halogeton glomerata*) and cheatgrass (*Bromus tectorum*).

Halogeton is an introduced weed species from southeastern Russia and northwestern China that is commonly found throughout the Rocky Mountains and Great Basin. It favors disturbed sites in salt-desert shrubland and surrounding big sagebrush community types. It can occur with other annuals, such as cheatgrass and tansymustards (*Descurainia pinnata* and *D. sofia*). Halogeton is high in oxalates and is a serious health threat to grazing animals, especially sheep.

Cheatgrass is common in waste or disturbed areas in much of the western United States. It is a native of southern Europe and southwestern Asia and also may be found in north Africa. Cheatgrass seed may germinate from fall through spring, depending on moisture conditions. Cheatgrass grows on a variety of soils and is particularly favored by conditions of disturbance, such as those produced by fire, overgrazing, or cultivation. Cheatgrass acts as both an early seral invader and a climax dominant on many sites that historically supported a perennial grass and forb understory. Cheatgrass invades sites soon after disturbance. Cheatgrass is considered to be an established species in Nevada.

TABLE 3-2. INVASIVE WEEDS PRESENT AT THE CNHTIC AND WAYSIDE SITES

Site	Weeds Present
CNHTIC	Cheatgrass Pepperweed Tansy Mustard
Beowawe	Halogeton Cheatgrass Russian thistle
Button Point	Cheatgrass Russian thistle Pepperweed
Trinity	Halogeton
Cosgrave	None observed

3.15.2 Environmental Impacts

No Action Alternative. The no action alternative would not affect the status of invasive weeds in the project area. The current vegetative condition makes the site prone to invasive weeds.

Proposed Action Alternative. Cheatgrass is an invasive weed that when established in high densities can lead to increased risk of range fire. Under this alternative, much of the 55-acre Center site would be restored using native grasses, forbs and shrubs. This would reduce the presence of cheatgrass over the site and decrease the risk of wildfire. The risk of fire would also be increased due to the presence of visitors at the Center site.

3.16 RANGELAND / GRAZING MANAGEMENT

3.16.1 Affected Environment

None of the wayside sites or the Center is located in a BLM grazing allotment. Livestock grazing has occurred in the past at the site of the Center. No grazing occurs at any of the wayside sites.

Sagebrush and rabbitbrush with little understory grass or forbs is currently growing on the site. As part of the grazing operation, a tunnel is used to move cattle under I-80 at the eastern portion of the property. Cattle are also moved down the frontage road to access pastures to the west.

3.16.2 Environmental Impacts

No Action Alternative. Under the no action alternative, grazing would continue at the proposed 55-acre site of the Center on the Maggie Creek Ranch. The tunnel passing under I-80 would continue to be used for a cattle crossing under the interstate. Use of the frontage road to move cattle to pastures to the west would continue.

Proposed Action Alternative. Under the proposed action alternative, approximately 55 acres would be removed from grazing on the Maggie Creek Ranch for construction of the Center. Fencing would be constructed to facilitate the movement of cattle through the tunnel passing under I-80. Several times a year, cattle would be moved through this area. During these times, fences would be opened to allow cattle to cross the entry road to the site, while at the same time fences would closed to prevent cattle from entering the entry road. This process would delay visitors to the Center for only a short time. Cattle would also continue to be moved down the frontage road to pasture areas located to the west. Fences along these corridors and around the Center would be maintained to prevent cattle from entering site. Some minor impacts to grazing would occur because of loss of land available for grazing.

3.17 SOCIOECONOMIC CONDITIONS

3.17.1 Affected Environment

The proposed Center is located in Elko County. The 2001 population for the State of Nevada and Elko County was estimated to be 2,106,064 and 45,275, respectively (U.S. Census Bureau 2003). The estimated 2001 population of the City of Elko is 17,093. From the period of April 1, 2000 through July 1, 2001, Elko County had no growth whereas the State of Nevada grew 5.4%. Over the period of 1990 through 2000, the population of the county grew approximately 35% with state population growth estimated at 66%. Per capita income in 2001 for Elko County was $24,703, and for the State of Nevada $30,128 (Bureau of Economic Analysis, U.S. Department of Commerce).

Total employment for Elko County during the first quarter of 2003 was estimated to be 18,070 with an unemployment rate of 6.8% (Elko County, Nevada, Labor Market Summary 2003). Table 3-3 provides employment information by employment sector for Elko County.

TABLE 3-3 LABOR FORCE AND INDUSTRIAL EMPLOYMENT DATA FOR 2002 FOR ELKO COUNTY, NEVADA

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	AVG.
Total	17,910	18,040	18,290	18,420	18,710	18,840	18,730	18,780	18,510				18,380
Natural Resources (Logging) & Mining	1,140	1,200	1,130	1,160	1,160	1,160	1,440	1,430	1,390				1,430
Construction	750	720	780	800	870	870	920	920	870				830
Manufacturing	140	150	160	150	150	150	150	160	160				150
Trade, Transportation, and Utilities	3,210	3,150	3,150	3,230	3,270	3,310	3,160	3,160	3,080				3,100
Information	210	210	210	210	210	210	210	210	200				210
Financial Activities	510	520	530	530	540	540	540	540	550				530
Professional and Business Services	780	770	860	840	890	890	860	910	830				850
Education and Health Services	940	950	980	1,000	980	990	950	960	960				970
Leisure and Hospitality	6,050	6,090	6,160	6,180	6,260	6,350	6,350	6,400	6,310				6,240
Other Services	420	420	430	440	450	450	400	400	380				390
Government	3,760	3,870	3,920	3,890	3,940	3,920	3,770	3,700	3,780				3,690

SOURCE: ELKO COUNTY, NEVADA, LABOR MARKET SUMMARY, 2003

Residents of Elko County enjoy a moderate cost of living and outstanding recreational opportunities. It is home to the annual "The Cowboy Poetry Gathering." Elko is the largest urban area and center of government and commerce in northeastern and north central Nevada. The region is also home to a sizable community of Basque sheepherders who brought their unique cultural traditions to the area.

Other major cities in Elko County are Wells, population 1250, located at the crossroads of I-80 and Highway 93; and Carlin, population approximately 2,161, located 23 miles west of Elko.

Wayside sites are located in Eureka, Humboldt, Pershing and Churchill counties. Populations for each of these counties is presented in table 3-4.

TABLE 3-4. 2000 POPULATION OF NEVADA COUNTIES WHERE CNHTIC AND WAYSIDES ARE LOCATED

Site	County	Population
CNHTIC	Elko	45,291
Beowawe Wayside	Eureka	1,651
Button Point Wayside	Humboldt	16,106
Trinity Wayside	Churchill	6,693
Cosgrave Wayside	Pershing	23,928

While the proposed construction of the Center in Elko County is expected to stimulate socioeconomic activity in Elko County, adding signage to the existing rest stops in other counties along the I-80 corridor is not.

3.17.2 Environmental Impacts

No Action Alternative. Under the no action alternative, conditions would remain as they currently exist and no socioeconomic effects would occur.

Proposed Action Alternative. A study was completed in October of 2000 (Snyder 2000) that addressed the feasibility of providing an interpretive center, based on the California Trail, available to the public. Important facts revealed by the study are:

- Between 1995 and 1999 interstate traffic in the area of the proposed site increased 23%.
- Summer traffic volumes are approximately twice that of winter numbers.
- The Elko Airport had an estimated 140,000 enplanements in 1997, providing an additional potential source of visitors to the facilities.
- The states of California and Nevada have a combined population of approximately 34 million people, providing a large potential market.
- The City of Elko and Elko County are projected to grow at rates of 42% and 96%, respectively, over the next 15 year.

Important conclusions from this study are:

- Anticipated vehicular traffic to the site is anticipated to be below the national average for visitation to historic trails facilities.
- The air transportation market is very important to the local economy as visitors would likely rent vehicles, utilize a shuttle service and possibly require overnight accommodations.
- Anticipated population growth in California and Nevada ensure that the potential visitor market would continue into the future.
- California is an important market with respect to numbers of potential visitors and the established broad base of organizations dedicated to the history of the early California migration and settlement.
- The anticipated future growth of the City of Elko and Elko County would provide visitors to the facilities, especially the Center, over the course of the entire year. An active program of providing year-round attractions and programs would create an opportunity for this to happen.

Additionally, easy access to the Center from I-80, the quality of the site itself, and the connection between the Center and other on-site activities would provide additional incentives for visitation. Active marketing would also encourage people visiting the area for other destinations to visit the Center. The wayside sites will also help disperse the economic development activity throughout the region.

Short-term benefits to the City of Elko and surrounding communities would be realized during construction of the Center. Local construction companies and material suppliers would benefit as

well, with a possible short-term increase in employment. Over the long term, the Elko community would realize benefits due to increased visitation and expenditures by tourists on food and lodging.

3.18 Cumulative Impacts

The purpose of the cumulative impact analysis is to determine the impacts of the action in relation to past, present and reasonably foreseeable actions. Reasonably foreseeable actions of the BLM include the development of additional wayside sites, as identified by the interpretive plan for California National Historic Trail (BLM, 2002). Other projects may also be undertaken by local agencies. For example, the City of Elko has recently completed the construction of a new airport in support of achieving additional economic development for the region.

No Action Alternative

Recreation and interpretation associated with heritage tourism will continue, even if the Center is not constructed at its current location. Facilities associated with these activities will continue to be constructed in the City of Elko and other areas in the region. These would include museums, exhibits, wayside sites and other facilities associated with interpretation of the trail and tourism. This has already occurred in the Town of Wells and could occur in other places, such as Winnemucca. Past and ongoing actions include planning with local partners such as the City of Elko and the Oregon-California Trails Association. The increase in the number and duration of visitors to the area could indirectly affect natural and cultural resources.

In addition to the increased number of visitors, population and employment trends will also spur additional residential and commercial development in the region and on lands in close proximity to the Center site.

The overall result of the increase in human activity in the region could be additional impacts, including increased weed invasion, littering, collection of cultural and archeological resources, and increased access. Additional traffic, noise and air pollution could also result from the increase in visitors and development.

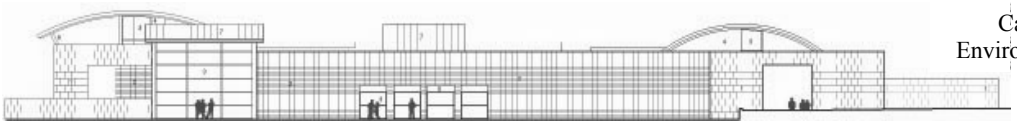
The development of additional waysides throughout the region and availability of information about the trail is expected to attract more visitors to portions of the California trail, which may increase the potential for impacts to this historic resource. The waysides are being planned in consultation with the SHPO to avoid or otherwise mitigate adverse impacts. Some waysides are proposed for development within urban environments, in partnership with local agencies. For example, the "Hot Hole" would be constructed within the City of Elko. The waysides would be developed at a small scale. Development would include mitigation and monitoring measures as necessary to ensure protection of the historic trail and other cultural resources.

Proposed Action

As described in the no action alternative, other facilities related to the interpretation of the trail will continue to be constructed. With the construction of the Center, future projects will have a central distribution point. Anticipated visitation to the site is expected to reach 65,000 visitors a year. One of the goals of the Center is to provide an economic stimulus to the area from additional visitors staying

longer in the region. Other benefits would result from visitors learning more about the California Trail and its preservation.

The Center will serve as a centralized location for information about the California Trail and other destinations. One of the main objectives of these facilities would be to provide information on trail preservation. The net result would be an increased awareness about cultural resources in the region and the steps necessary for their preservation. The wayside sites would provide information about the Center, and visa versa.



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4.0 Consultation and Coordination

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4.0 CONSULTATION AND COORDINATION

4.1 INTRODUCTION

During the planning process for this environmental assessment (EA), formal and informal efforts were made by the Bureau of Land Management (BLM) to involve other federal agencies, state and local governments, Tribes and the public. Several public workshops were conducted throughout the process on design of the Center and wayside sides. Also, as part of the resource inventory, various agencies have been contacted to request data to supplement and update the information available in existing reports. This section describes these efforts, including the formal consultation required and the public involvement activities that were conducted.

4.2 AGENCY CONSULTATION

4.2.1 Special-Status Species

The Endangered Species Act of 1973, as amended (16 USC 1531 et seq.), requires all federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that any action authorized, funded or carried out by the agency does not jeopardize the continued existence of listed species or critical habitat. As discuss in Section 3.12, the BLM has determined that the Proposed Action will have no effect on any listed or proposed species or critical habitat. No listed species or critical habitat is present on the any of the properties.

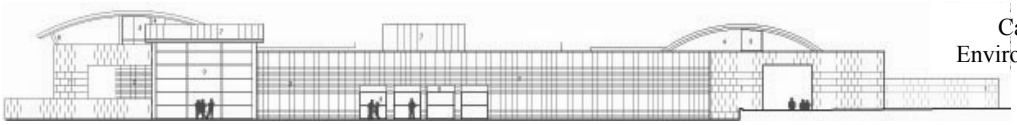
4.2.2 Nevada State Historic Preservation Office (NSHPO)

The BLM operates in accordance with Section 106 of the National Historic Preservation Act (NHPA) and 36 CFR Part 800, and other laws, regulations and policies. Based on surveys, a number of cultural sites have been identified at or near the interpretive sites. Construction activities would avoid impacting known cultural resources in compliance with Section 106 of the National Historic Preservation Act. Consultation with the State Historic Preservation Office concerning the project has been conducted.

4.2.3 Tribal Consultation

Throughout the development of the Center, Native American Tribes have been contacted and invited to participate in the process at all levels. Certified letters requesting comments and tribal input have been sent; tribal specialists have been identified; discussions, dialogue exchange and updates on the project's progress have taken place via phone conversations, faxes, emails and also various Western Shoshone Information meetings; and, attempts have been made to meet specifically on the Center development with the various Western Shoshone and Paiute Tribes and Bands. Currently, efforts are being made to invite and coordinate meetings between BLM and the interested tribes and bands to discuss the specifics of the Center (exhibits and stories) and wayside site development.

Contacted and/or participating tribes, bands, and groups include the Temoak Tribe of Western Shoshone (Elko, Battle Mountain, South Fork, Wells), DuckValley Shoshone/Paiute Tribes,



Duckwater Shoshone Tribe, Ely Shoshone, Yomba Shoshone, Fallon Paiute/Shoshone, Goshute Tribe, Western Shoshone Defense Project, Western Shoshone Cultural Center, and the Great Basin NAGPRA Coalition.

Issues and concerns to date revolve around the information (exhibits and stories) that would be included in the actual Center. Also, there are some concerns about the level of ground disturbing development at the various wayside sites. Some tribal representatives and community members have also expressed interest in the possible economic development opportunities that may be available to the local tribes with the development of the Trials Center. At this time, BLM continues to seek tribal participation and is attempting to gather input and specific information from the various tribes and bands.

4.2.4 California Trail Center Advisory Board (CTCAB)

The California Trail Center Advisory Board (CTCAB) is a privately funded local organization that is responsible for development of the vision of the Center. The CTCAB was formed in 1999 to be consistent with the provisions of the National Trails Systems Act of 1968, a directive that sets forth parameters for a national trails system that includes recreation, scenic and national historic trails. The CTCAB partnered with the BLM approximately four years ago and has since been collaborating to fund, plan, design, construct, manage and maintain the interpretive center in the Humboldt River valley near Elko, Nevada. The CTCAB has been involved in all aspects of the project to date and would continue in this role in the future.

4.2.5 City of Elko and Elko County

The City of Elko and Elko County are financial partners in the project. The City is raising funds through the issue of public bonds. The funds would be utilized to help develop components of the Center. The City and County have been involved throughout the planning and design process to date and would continue to be involved in the future.

4.2.6 Oregon-California Trails Association (OCTA)

OCTA has been an integral partner in the project. The association and been involved in identifying issues and preservation strategies for the trail related to development of the adjacent wayside sites.

4.2.7 Federal Partnerships

Federal support, sponsored by Senator Harry Reid and Congressman Jim Gibbons, includes two funding measures for initial studies and preliminary design of the Center. Bill S-2749 authorizes federal funding for development of the Center. The bill also names the BLM as the owner of the Center, with obligations and the authority to develop, operate and maintain the center.

4.2.8 State of Nevada

A number of meetings were conducted with the Nevada Department of Transportation, Division III, to coordinate wayside activities at the four rest areas. Nevada State is also a financial partner of the project.

4.2.9 Other Agencies

In an effort to coordinate the project, additional meetings were held with the following organizations and agencies:

- City of Wells
- Sierra Pacific Power Company
- Humboldt High Roads
- Winnemucca BLM Field Office
- Anderson Mason Dale Architects
- Robert Peccia & Associates
- SDG, Inc.
- The RMH Group, Inc.
- CTL/Thompson
- Condit Exhibits / S2 Associates, Inc.
- National Park Service, Long Distance Trails Office

4.3 PUBLIC INVOLVEMENT ACTIVITIES

The purpose of the process is to identify issues and concerns related to the project, and to identify the range of issues to be addressed in the EA. A total of five public meetings were held during the process, three in Elko and two in Wells. The following information was presented at the meetings:

- Building and site programs were presented and refined.
- Interpretive outline was presented and discussed.
- The schematic design alternatives were presented, including two site design alternatives, three building concepts, and four conceptual wayside development level concepts.

Information from the public was recorded and used to identify issues and refine concepts.

4.4 INDIVIDUALS INVOLVED WITH PREPARATION AND REVIEW OF THE DOCUMENT

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Elko Field Office

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Dee Lloyd, Project Manager
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Gerald Dixon, Native American Consultation
Helen Hankins, Management Direction
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David Stipe, ASLA, Landscape Architect
Scott Hodson, Landscape Architect
Drew Stoll, Geographic Information Systems
Jim Kurtz, Air and Noise
Linda Spangler, Technical Editing
Tom Keith, Technical Oversight

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